

Sinclair Programs



**ABANDONED HOUSE
RAT INVASION**

**DAMSELS IN DISTRESS
GENERAL DOOM
STAMPEDE
and many more**

**30 Programs for
the Spectrum
and
ZX-81**

SPOT THE DIFFERENCE!

Choosing which game to buy from the mountain available is a difficult job, especially when everyone claims to produce the best on the market. But how can you tell the best from the rest? To help you decide, read on. . . .



THE DUNGEON MASTER

Let your Spectrum be your guide in a totally new dimension in adventures in the true spirit of traditional role playing games where YOU design the scenario.

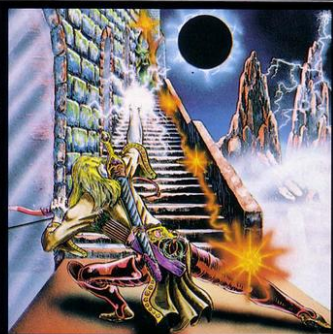
"I have been a Dungeons and Dragons fan for several years...The package provides excellent entertainment for all fans of the cults and should prove a good introduction to the game."

...Sinclair User.
"Highly recommended for its versatility, originality and quality. Definitely well worth obtaining."
...ZX Computing.
ZX Spectrum 48K £7.50
Written by Graham Stafford.

**What the
real critics say. . .**

Very rarely have software titles produced such universal acclaim as 'Halls of the Things' and 'The Dungeon Master'. Now, with three brand new programs, Crystal continues to set the standard of software excellence. The difference is obvious - the choice is yours:

The Best or The Rest.



HALLS OF THE THINGS

A stunning multi-level maze 'arcade - adventure'.
"Excellent and dangerously addictive - could change the Spectrum games scene overnight".
...Sinclair User.

"Spectacular - One of the best games I've seen, finely balanced between simplicity and addictiveness - superb graphics and colour - I CAN'T RECOMMEND IT HIGHLY ENOUGH!"
...Popular Computing Weekly.

ZX Spectrum 48K £7.50
Written by Neil Mottershead, Simon Brattell and Martin Horsley.



INVASION OF THE BODY SNATCHAS!

At last! a version as fast and furious and as frustratingly addictive as the arcade original. Landers, Mutants, Bombers, Pods, Swarms and much much more combine to produce the ultimate space game!

ZX Spectrum 48K £6.50
Written by Simon Brattell and Neil Mottershead.



THE ISLAND

The ultimate test of logic and deduction! Can you solve the hidden mysteries of the South Pacific Island on which you have been stranded - and escape alive! A brilliant classic style adventure game to fascinate and frustrate you for months!

ZX Spectrum 48K £7.50
Written by Martin H. Smith.



ROMMEL'S REVENGE

A brilliant interpretation of the most visually stunning arcade game of all time. Superb high resolution 3D graphics with full perspective plus a host of new and exciting features make Rommel's Revenge the most spectacular game ever produced for your Spectrum!

ZX Spectrum 48K £6.50
Written by Martin Horsley.



Please Supply:

- Invasion of the Body Snatchers ☐
- Rommel's Revenge ☐ The Island ☐
- Halls of the Things ☐ The Dungeon Master ☐
- Catalogue (please enclose SAE 6in. x 9in.) ☐

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ADDRESS.....

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Instructions for graphics characters are printed in lower-case letters in our listings. They are enclosed by brackets and separated by colons to distinguish them and the brackets and colons should not be entered.

Inverse characters are represented by the letter "i" and graphics characters by "g". Thus an inverse W would be represented by "iw", a graphics W by "gw", and an inverse graphics W by "igw".

Spaces are represented by "sp" and inverse spaces by "isp". Whenever any character is to be used more than once, the number of times it is to be used is shown before it, together with a multiplication sign. Thus "6*isp" means six inverse spaces and "(g4*4:g3)" would be entered as a graphic four, followed by an inverse four repeated four times, followed by a graphics three.

Where whole words are to be written in inverse letters they appear in the listings as lower-case letters. Letters to be entered in graphics mode on the Spectrum are underlined.

Inverse characters may be entered on the ZX-81 by changing to graphics mode and then typing the appropriate characters and on the Spectrum by changing to inverse video and typing the appropriate letters. Graphics characters may be entered on the ZX-81 by changing to graphics mode and then pressing symbol shift while the appropriate characters are entered. On the Spectrum graphics characters may be obtained by changing to graphics mode and then pressing the appropriate character. User-defined graphics will appear as normal letters until the program has been RUN.

"ADVENTURES IN

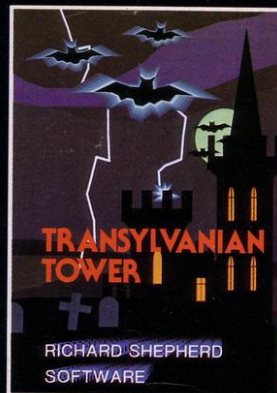
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AND ALL LEADING

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enter via the dungeons ...
navigate your way through
500 3-D rooms ... survive
the swooping vampire bats
... reach the terrifying top ...

confront and kill Count
Kreepie, ridding the world
of this Transylvanian Terror.

Can you survive the Top of
the Tower? Full save routine
for use during the hours of
darkness! 48K Spectrum
£6.50

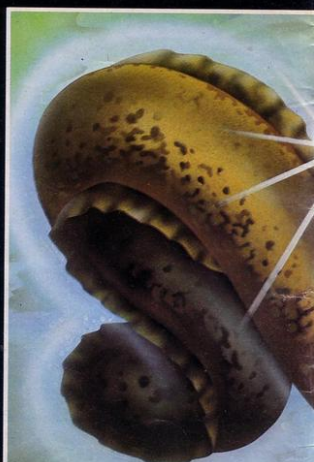
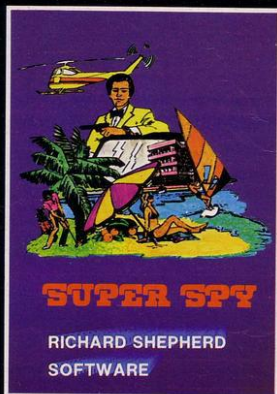


Super Spy

Locate the secret island
hideaway of the mysterious
meglomaniac Dr. Death.

Follow his trail across
continents, through
complex puzzles and 3-D
mazes. Discover the
entrance to his under-
ground lair — but beware
— even with your death-
defying gadgets his evil
henchmen may still win the
day!

With save routine for part
time secret agents! 48K
Spectrum £6.50



Devils of the

Can you discover the fabled treasure
by lethal crabs and menacing ele-
phants of the Lost City as you wait
ancient columns. Explore the hidden
the treacherous seabed, each with
dangers.

Sensational 3-D graphics used as
before! 48 K Spectrum £6.50. Full

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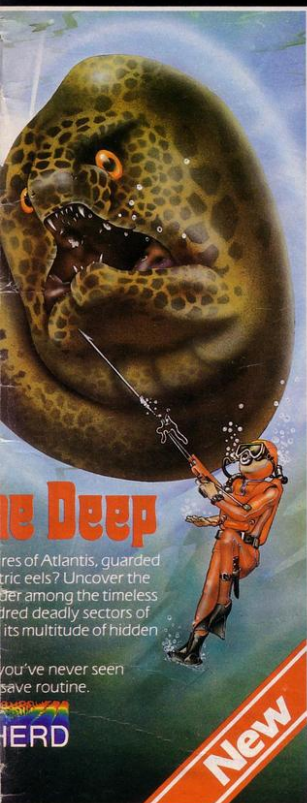
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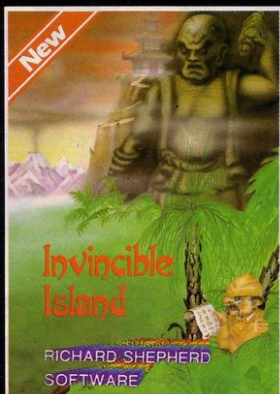
TH, JOHN MENZIES, BOOTS*
COMPUTER STORES



res of Atlantis, guarded
tragic eels? Uncover the
ber among the timeless
dred deadly sectors of
its multitude of hidden

you've never seen
save routine.

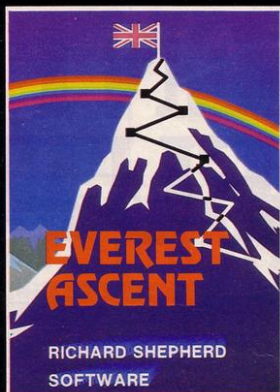
HERD



Invincible Island by Peter Cooke

Exhaust your ingenuity in the quest to find The Seven Parchments of Xaro and their meaning! Will they lead you to undreamt of treasures or eternal doom? Explore the mysteries of the stockade and puzzle within the Pagoda! A spectacular split screen graphic and text adventure to braintease you for weeks!

Adventurous graphics for every location. Save routine. 48K Spectrum £6.50.



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Stake your claim to the top of the world in this strategic vertical adventure. Conquer the summit of the world's highest peak! ... struggle from base camp to base camp ... survive the elements ... watch out for avalanches, thin ice and wayward sherpas ... encounter abominable snowmen and cross bottomless crevasses!

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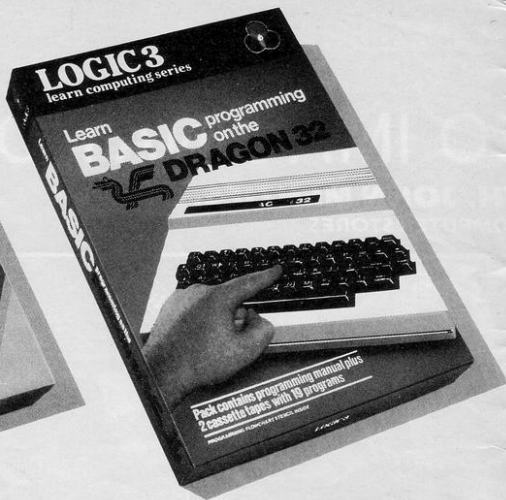
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(delete as inapplicable)

SP1/84

— THE KEY TO THE WORLD OF TOMORROW. —

LETTERS

ON BEHALF of all your readers, thank you for publishing a wonderful magazine. In my second breath I implore you to publish fortnightly. That would satisfy everyone and would prevent the agony of waiting. Of course I am speaking feelingly as I am more than 70 years old. This is my only pastime and it takes me about two weeks to try all the programs. There have been several times a program has not run, but a letter to you soon solves any problems.

I was interested in the letter from Allisoun Fern; I did not know there were different models of the Spectrum. There is nothing in the manual which states the model or how to identify from other models, so your reply was of great interest; the IN statements are now committed to my memory bank. I bought my Spectrum in June. Is there anything about this model on which you could enlighten me?

I have all the time in the world to enter any program so I know everything I enter is exactly as printed. For instance, two programs — Slalom and Quasimodo — in the November issue failed to run; are they not reading the data? Could that have anything to do with the model, or do you think some part of the computer is faulty?

I know you must be up to your necks in letters. Could you set up a telephone answering service, since the questions would be mainly about errors? A set of ready-made answers could be ready.

There must be many programs you have published which newcomers do not know about. Could you reprint them? When you come to the financial part, your magazine proves the cheapest and, as far as programs go,

they surpass all the opposition. I would not mind if you raised the price so long as you increased the number of programs and added some interesting features.

Why not increase the number of readers' letters? Many computer thumpers would be over the moon to see theirs printed. As I have seen in your letters page, items and information other readers have to offer are extensive.

That would lead to us learning the computer to become more capable and, in time, repay you by sending programs we have composed. What a happy world it is that could happen.

**C Fowler,
Sheffield.**

Record Breaker?

I AM writing about a program in the July issue of *Sinclair Programs*, Alphabet Time. On my first attempt on the program I got 120 units. I would like to know if anyone else has written to say they have beaten my record.

**Andrew Lamb, aged 11,
Edgbaston, Birmingham.**

Werewolf's Lair Changes

IN THE OCTOBER edition in the game Werewolf's Lair a few mistakes were made. The peeks which make sure that you or the monster do not go through the walls of the maze are set up for the wrong graphics. To solve this you can either change all the graphic Hs in the maze plot to graphic As or change the 8 in lines 370, 570 and 630 to I36. With the second method you must also change the

graphic As in lines 90 and 290 to graphics Hs.

I found this a very enjoyable game and have managed to achieve a high score of 753.

**Tom Liptrot,
Burscough,
Lancashire.**

ZX-81-to-Spectrum Conversion

I AM a newcomer to computers and I own a Spectrum 48K machine. I find your magazine very helpful but I have one problem which you could solve for me.

In the ZX-81 listings there are certain commands which are foreign to me — i.e., FAST, SLOW, g.w., g.a. Could you supply me with a list of Spectrum commands to replace them in the listings so I can make full use of your magazine? Perhaps the listing could be printed in the magazine for the benefit of other Spectrum owners.

**M Gibson,
Stoke-on-Trent.**

Letter not Figure

IN PRINTING my letter in the October issue of *Sinclair Programs* you made a small mistake which made nonsense of the letter. The last part should read: Line 135 IF n=10 and y=16 THEN PRINT AT 13,17; "x":PAUSE 7*(4-y)+10; PRINT AT 13,17; " "

**A Ferguson,
Middlesbrough.**

Mark Three Defender

YOU RECENTLY sent me a reply to my letter concerning a fault in the Defender program published in the July issue of *Sinclair Programs*.

You said in your letter that a number of your readers had experienced the same fault i.e., failure of 'Cap Shift' and 'Z' keys to move the space-
craft up and down.

I have delved into this fault and have come up with a solution to the problem. If line 2020 of the program is amended as shown, all will be well.

My amended program now works perfectly.

I hope that this information will be of use to you and your readers and that it will be published in *Sinclair Programs* in due course.

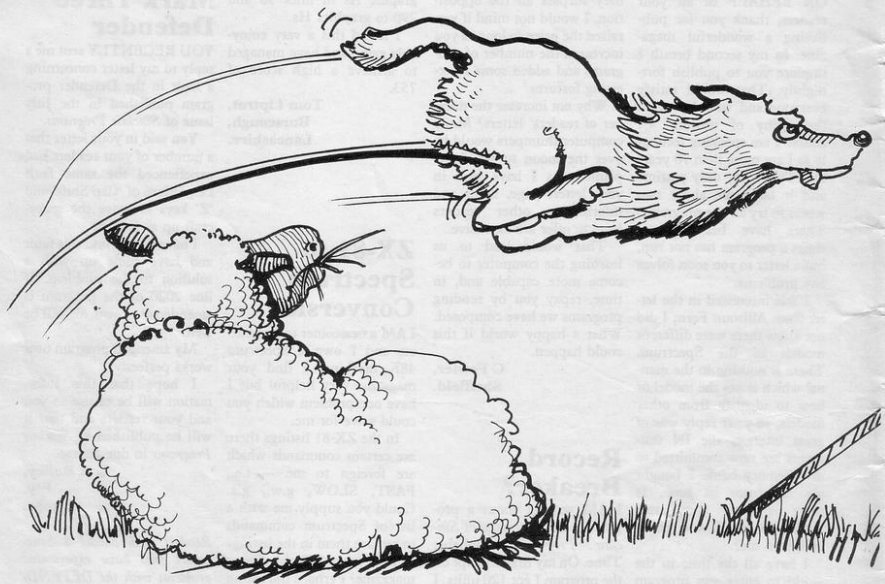
**C A Bailey,
Ely,
Cambs.**

Readers with Model 3 Spectrums who have experienced problems with the DEFENDER program may find this amendment useful.

```

0000 LET G=0:001 LET A=0:002 LET B=0:003
0004 GOTO 0005:0005 GOTO 0006:0006 GOTO 0007:0007
0008 GOTO 0009:0009 GOTO 0010:0010 GOTO 0011:0011
0012 GOTO 0013:0013 GOTO 0014:0014 GOTO 0015:0015
0016 GOTO 0017:0017 GOTO 0018:0018 GOTO 0019:0019
0020 GOTO 0021:0021 GOTO 0022:0022 GOTO 0023:0023
0024 GOTO 0025:0025 GOTO 0026:0026 GOTO 0027:0027
0028 GOTO 0029:0029 GOTO 0030:0030 GOTO 0031:0031
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0036 GOTO 0037:0037 GOTO 0038:0038 GOTO 0039:0039
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0396 GOTO 0397:0397 GOTO 0398:0398 GOTO 0399:0399
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0972 GOTO 0973:0973 GOTO 0974:0974 GOTO 0975:0975
0976 GOTO 0977:0977 GOTO 0
```


SHEEP DOG



```

10 REM "SHEEP DOG"
20 DIM a(4): DIM b(4): DIM c(4)
30 FOR n=1 TO 4: LET a(n)=INT(RND*31)+1: LET c(n)=0: LET b(n)=1
40 NT (RND*20)+1: NEXT n
50 LET x=10: LET y=10
60 LET t=0
70 LET a$="( 1 )"
80 LET b$="( 0 )"
90 INPUT "DO WANT PASTURE OR D
ESERT P/D": IF a$="P" THEN P
APER 4
90 IF a$="d" THEN PAPER 6
95 IF b$="d" THEN PAPER 6
97 BORDER 1: CLS
100 FOR n=0 TO 7: READ q: POKE
USR "P"+n,q: NEXT n: DATA BIN 0,
BIN 10000000,BIN 10000100,BIN 11
000111,BIN 01111111,BIN 01111100
,BIN 01000100,BIN 01000100
110 FOR n=0 TO 7: READ q: POKE
USR "c"+n,q: NEXT n: DATA BIN 0,
BIN 0,BIN 00000100,BIN 01111111,0
IN 01111100,BIN 01000100,BIN 010
00100,BIN 01000100
120 FOR n=0 TO 7: READ q: POKE
USR "i"+n,q: NEXT n: DATA BIN 0,
BIN 00000001,BIN 00100001,BIN 11

```

```

00011,BIN 11111110,BIN 00111110
,BIN 00100010,BIN 00100010
130 FOR n=0 TO 7: READ q: POKE
USR "u"+n,q: NEXT n: DATA BIN 0,
BIN 0,BIN 01000000,BIN 11111110,
BIN 01111110,BIN 00100010,BIN 00
100010,BIN 00100010
140 FOR n=0 TO 7: READ q: POKE
USR "T"+n,q: NEXT n: DATA BIN 0,
BIN 00000000,BIN 00000100,BIN 11
000111,BIN 11111111,BIN 11111100
,BIN 01000100,BIN 01000100
150 PLOT 103,80: DRAW 32,0: DRA
W 0,8: DRAW -32,0: DRAW 0,-8: PR
INT AT 10,15: " " PLOT 120,80: D
RAW 0,8: PLOT 120,80: DRAW 0,8
190 PRINT INK 0,AT 0,0,"(3211
p)": INK 6: PAPER 0,AT 0,24:"DOG
S=(ppp)"
200 FOR n=1 TO 4
220 PRINT AT x,y, " "
230 IF INKEY$="7" AND x<1 THEN
LET a$="( 1)": LET x=x+1: BEEP
.001,35: BEEP .003,55
240 IF INKEY$="6" AND x<21 THEN
LET a$="( 1)": LET x=x+1: BEEP
.001,25: BEEP .003,45
250 IF INKEY$="0" AND y<31 THEN
LET a$="( 0)": LET y=y+1: BEEP

```

```

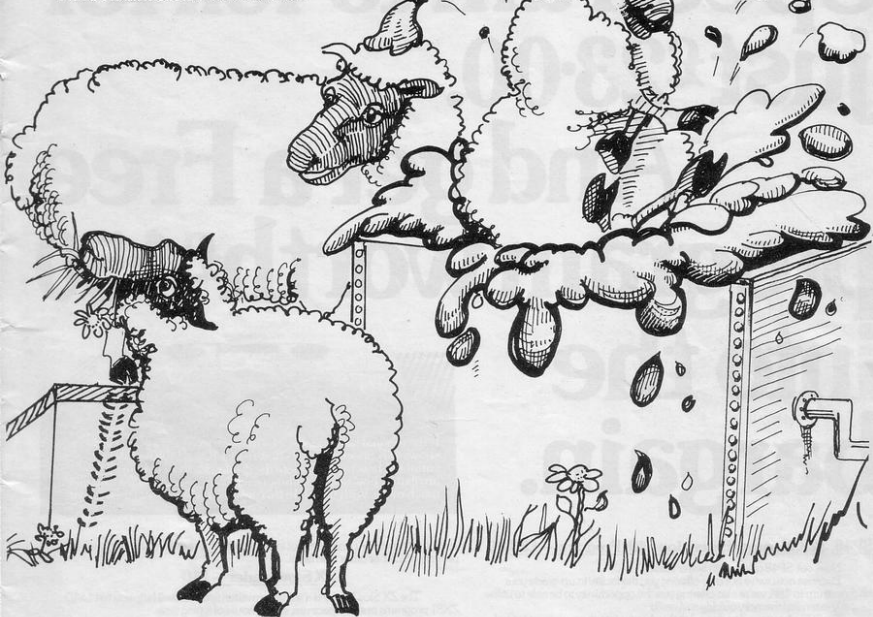
.001,15: BEEP .003,35
260 IF INKEY$="5" AND y>8 THEN
LET a$="( 1)": LET y=y+1: BEEP
.001,5: BEEP .003,25
263 PRINT INK 1,AT x,y,a$
265 IF c(n)=1 AND n<4 THEN NEXT
T n
267 IF c(n)=1 AND n=4 THEN GO
TO 710
270 PRINT AT b(n),a(n): " "
280 IF a(n)>y AND a(n)<21 THEN
LET a(n)=a(n)+1: LET b$="( 0)":
GO TO 350
290 IF b(n)>x AND b(n)<21 THEN
LET b(n)=b(n)+1: LET b$="( 0)":
GO TO 350
300 IF b(n)<x AND b(n)>1 THEN
LET b(n)=b(n)-1: LET b$="( 0)":
GO TO 350
310 IF a(n)<y AND a(n)>8 THEN
LET a(n)=a(n)-1: LET b$="( 0)":
GO TO 350
320 IF a(n)=0 THEN LET a(n)=a(
n)+1
330 IF a(n)=31 THEN LET a(n)=a
(n)-1
340 IF b(n)=21 THEN LET b(n)=b
(n)-1
345 IF b(n)=1 THEN LET b(n)=b(

```


HERD YOUR wandering sheep into the sheep dip, controlling your sheep dog with the cursor keys. Do not run into them but bark at them from a safe distance.

Sheep Dog was written for the 16K Spectrum by Ian Wombwell of Bishop Auckland, County Durham.

Characters to be entered in graphics mode have been placed within brackets. These brackets should not be entered.



```
n)+1
350 PRINT INK 0;AT b(n),a(n);b
$
360 IF a(n)=15 AND b(n)=11 THEN
LET c(n)=1; LET a(n)=n+12; LET
b(n)=10; PRINT AT 11,15; " "; PR
INT AT b(n),a(n);" (o)"; BEEP .0
1,10; BEEP .005,60; BEEP .03,20
380 IF x=b(1) AND y=a(1) OR x=b
(2) AND y=a(2) OR x=b(3) AND y=a
(3) OR x=a(4)=y AND b(4)=x THEN L
ET l=1-1; PRINT AT 0,29+1;"(c)";
"; LET x=10; LET y=10; BEEP .1-
30; BEEP .05,0; BEEP .3,-10; IF
1<=0 THEN GO TO 900
700 NEXT n
710 PLOT 103,80; DRAW 32,0; DRA
W 0,8; DRAW -32,0; DRAW 0,-8; PR
INT AT 10,15; " "; PLOT 120,80; D
RAW 0,8; PLOT 120,80; DRAW 0,8
720 FOR n=1 TO 4: IF c(n)=1 THE
N PRINT PAPER 0; INK 7;AT 0,12
;"SHEEP=";AT 0,17+m;"(o)"; PRIN
T AT b(m),a(m);" (o)";
740 IF c(1)=1 AND c(2)=1 AND c
(3)=1 AND c(4)=1 THEN GO TO 1000
741 NEXT m
```

```
745 LET t=t+1; PRINT PAPER 0;
INK 5;AT 0,3;"TIME=";t
```

```
750 GO TO 200
800 GO TO 200
900 PRINT AT 10,10;"you're dead"
910 PRINT FLASH 1; PAPER 2; IN
```

```
K 5;AT 11,3;"Keep away from the
sheep"; PAUSE 70; PRINT INVERSE
1; INK 1;AT 12,8;"PRESS ANY KEY
1; IF INKEY="" THEN GO TO 910
920 RUN
```

```
1000 PRINT FLASH 1; PAPER 0; IN
K 5;AT 0,3;"TIME=";t
1010 PRINT AT 10,10;"Game Over";
PAPER 1; INK 6;AT 11,7;"YOU CRIE
D"; INK 1;AT 12,8;"PLACE"
1020 IF INT (t/25)<=3 THEN LET
b="!!!EXCELLENT!!! 100%"; GO TO
1100
```

```
1030 IF INT (t/25)<=4 THEN LET
b="GREAT!! 80%"; GO TO 1100
1040 IF INT (t/25)<=5 THEN LET
b="GOOD! 70%"; GO TO 1100
1050 IF INT (t/25)<=6 THEN LET
b="AVERAGE 60%"; GO TO 1100
1060 IF INT (t/25)<=7 THEN LET
b="FAIR 45%"; GO TO 1100
```

```
1070 IF INT (t/25)<=8 THEN LET
b="SLOW! 30%"; GO TO 1100
1080 IF INT (t/25)<=9 THEN LET
b="NOT AT ALL GOOD 20%"; GO TO
1100
1090 IF INT (t/25)>10 THEN LET
```

```
b="A LOAD OF !!! 10%"; GO TO 1
100
2000 PRINT INK 7; PAPER 2;"YOU
```

```
ARE "jb";
2010 FOR n=1 TO 21: PAUSE 5; PRI
NT AT 10,15;"(o)";AT 10,13;"(p
)";AT 10,17;"(o)"; BEEP .001,10
; BEEP .01,20; PAUSE 5; PRINT AT
10,15;"(t)";AT 10,13;"(t)";AT
10,17;"(t)"; BEEP .001,0; NEXT
n
```

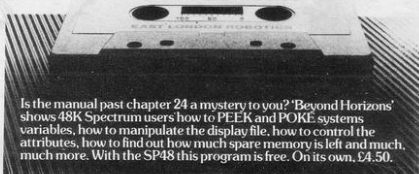
```
2100 INPUT "Another go Y/N";jb;
IF b="y" THEN RUN
```

```
2111 LET a=0; LET b=50; LET c=-1
2200 BEEP a/10000,b; LET a=a+1;
BORDER INT (RND*7); IF a=20 THEN
LET a=10; LET b=b+1
```

```
2210 IF b=60 THEN LET b=0
2220 GO TO 2200
```


Extend your 16k Spectrum to 48k for just £23.00.

And get a Free program worth £4.50 into the bargain.



Is the manual past chapter 24 a mystery to you? 'Beyond Horizons' shows 48K Spectrum users how to PEEK and POKE systems variables, how to manipulate the display file, how to control the attributes, how to find out how much spare memory is left and much, much more. With the SP48 this program is free. On its own, £4.50.

SP48, 32K Memory Extension with Program — £23.00

Now, our SP48 offers even better value.

Because now, we're not only offering you the facility to up-grade your 16K Spectrum to 48K, we're also offering you the opportunity to be able to utilise this vastly extended memory quickly and easily.

For £23 all you need to do is plug the chip-set into the sockets provided by Sinclair on your issue 2 (or £35 for issue 1) and you have a standard 48K Spectrum fully compatible with all Sinclair add-ons and very low in power consumption.

There is no soldering required.

Fitting and removal are easy.

And the SP48 carries our full warranty and is upgradable, on a part exchange basis, to SP80.

Then all you need to do is LOAD our specially written 48K guide program, 'Beyond Horizons', and your 48K computer will guide you through its memory.

With no need to labour through manuals.

This will save you time, because we all know how easy it is to get lost with memory maps.

SP80 Paged 64K memory extension — £46

The fitting, power consumption and add-on compatibility are identical to the SP48 (Issue 1 Version £50).

It can be used as a standard 48K, but software instructions can switch to a second page of 32K.

But this is not recommended for the complete beginner.

Yet it is of tremendous benefit to the serious user. And an SP80 FORTH compiler will be available in late September.

For a fit and test service at our premises £3, and by registered post £7.

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We also give a six month guarantee on the computer, regardless of the age of your trade-in ZX81.

The extra memory uses only a quarter of the power consumption of a

16K plug-in memory, and does not interfere with any standard add-ons, such as printers RS232 or other interfaces.

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The ZX Slowloader is a software masterpiece that will help you to LOAD ZX81 programs onto a Spectrum, saving hours of typing time.

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(will also run on 48K Spectrum)

"quantity as well as quality"

Sinclair User, Oct '82

"if each game was on a separate tape and selling for £5 each I would still recommend them"

ZX Computing, Oct/Nov '82

"Easy to operate, graphically impressive and good value for money."

The Times, 11th Dec '82

"Definitely good value for money at £6 ... A smooth clear display and a relatively fast response from the keys. Graphics are as good as you will ever get on the 81."

What Micro? Nov '83



CASSETTE A

GHOST GOBBLER
Eat the ghosts before the ghosts eat you. Eat a star and you can chase the ghosts for a while.

ALIENKILL Control lasers, rockets and a force-field to stop the aliens from landing.
MOUSETRAP Trap the mouse in the corner but not anywhere else.

REVERSI A game of skill with simple rules but sophisticated tactics. Play against the computer.

LASER DEFENCE Control the laser sight to shoot down the alien ships. Machine code sound routines.

CASSETTE 1, eleven programs (including 7 in machine code) for 1K ZX81 £3.80

CASSETTE 2, ten games in Basic for 16K ZX81 £5

CASSETTE 3, eight programs (including 1 in machine code) for 16K ZX81 £5

Ten programs for £6

TANK BATTLE For 2 players simultaneously or play against the computer. Each player has 2 rotate controls and move and fire controls. The tanks fire steerable missiles. **PHOEBUS** A puzzle.

BLACKSPOT Gobble the stars and avoid running into black spots created by crossing your own path.

CUBE Manipulate a cube any size from 2 x 2 x 2 to 7 x 7 x 7.

MINFIELD Collect the crowns while avoiding the mines and the electrified fence.

plus an extra ...

GRAPHIC DEMO Did you know your Spectrum could do all this?

CASSETTE 4 8 games for 16k ZX81 £6

ZX-SCRAMBLE (machine code) with 3 stages. Bomb and shoot your way through the fortified caves.



GUNFIGHT (machine code)



INVADERS (machine code)



THE FUNGALIDS ARE GROWING AND WHEN THEY REACH THE SKY THEY BRUCE DEARL SPORES. YOU CONTROL A FLYER AND YOUR MISSION IS TO DESTROY THE FUNGALIDS BY RELEASING ANTI-FUNGUS BOMBS ON THEM.



GALAXY INVADERS (machine code)

Fleets of swooping and diving alien craft to fight off.

SNAKEBITE (machine code)

Eat the snake before it eats you. Variable speed. (very fast at top speed).

LIFE (machine code)

A ZX81 version of the well known game.

3D TIC-TAC-TOE (Basic)

Played on a 4 x 4 x 4 board, this is a game for the brain. It is very hard to beat the computer at it.

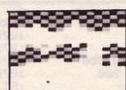
7 of the 8 games are in machine code, because this is much faster than Basic. (Some of these games were previously available from J. Steadman).

CASSETTE 5 8 games for 16k ZX81 £6

BYTE-MAN (machine code) (previously available from Mindseye)



BREAKOUT (machine code)



SPACE RESCUE (machine code) (previously available from Mindseye)



BLITZ (machine code)



PLANETOIDS (machine code)
Rotate, move, fire and hyperspace controls. Wide range of choice of speed and difficulty.

DODGEMS (machine code)
Dodge the computer's car while eating the dots.

DRAUGHTS (machine code)
Three skill levels.

MERCHANT (Basic)
Make your fortune on trading voyages in the Mediterranean and beyond.

7 of the 8 games are in machine code because it is much faster than Basic.

"New polish on old favourites ... the quality of the software and the smooth action displays created on the screen make the programs worthwhile for anyone who has a ZX-81 and plays games using it."

It is pleasant to see that Orwin's kind of quality is available again. Sinclair User, Sept '83

"Among the best reviewed was Cassette 5 from Orwin Software. For a mere £6, you get eight top quality games. All the games are of very high quality and would cost £4 or £5 if sold separately. Many of the other software houses could learn a lesson from these."

What Micro? Games Supplement, Nov '83

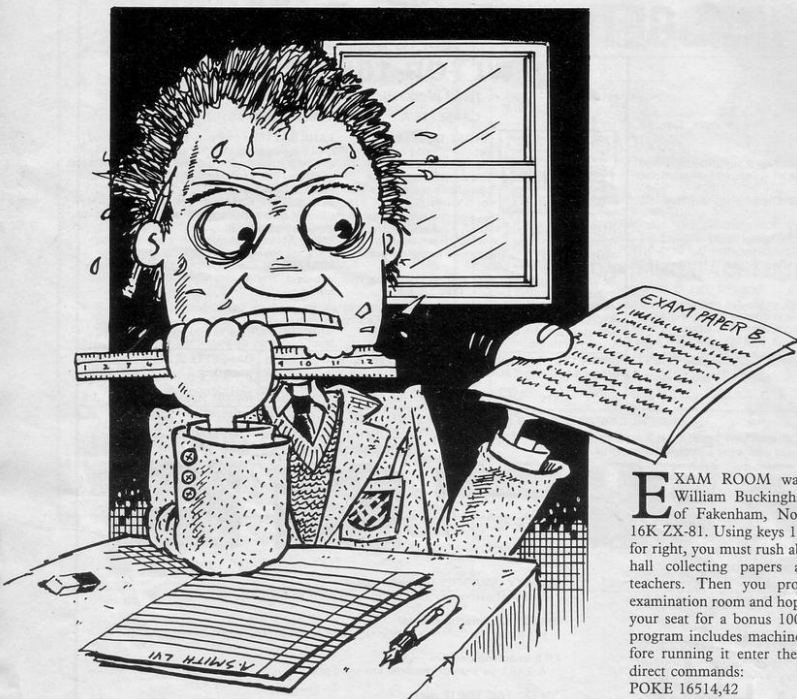


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EXAM ROOM

EXAM ROOM was written by William Buckingham, aged 12, of Fakenham, Norfolk for the 16K ZX-81. Using keys 1 for left and 0 for right, you must rush about the main hall collecting papers and avoiding teachers. Then you progress to the examination room and hope to return to your seat for a bonus 100 points. The program includes machine code, so before running it enter the following as

direct commands:

POKE 16514,42
POKE 16515,14
POKE 16516,64
POKE 16517,78
POKE 16518,6
POKE 16519,0
POKE 16520,201
POKE 16510,0

```
1 REM 1234567
2 CLS
10 LET S=0
20 LET X=19
25 LET Y=30
30 LET T=-1
31 FAST
35 PRINT AT 0,0;"(isp'exam roo
m'5kisp'main hall'0kisp)"
40 FOR F=1 TO 19
45 PRINT AT F,0;"(isp'30kisp'is
p)"
50 NEXT F
55 PRINT AT 20,0;"(32kisp)"
56 GOSUB 1000
61 PRINT AT X,Y;"0"AT X-1,Y;"
"AT X-2,Y;" "AT X-3,Y;" "
62 FOR F=1 TO 50
63 NEXT F
70 PRINT AT X,Y;" "
80 LET X=X+T
100 LET Y=Y+(INKEY="0")-(INKEY
100"LET Y=Y+(INKEY="0")-(INKEY
="1")
101 IF X=1 AND Y=1 THEN GOTO 20
```

```
80
110 PRINT AT X,Y;
120 LET L=USR 16514
130 IF L=129 THEN GOTO 500
140 IF L=23 THEN GOTO 300
150 PRINT "0"
160 GOTO 70
300 LET S=S+1
310 LET T=-T
340 GOTO 70
500 PRINT AT X,Y;CHR$ L
505 PRINT AT 18,5;"ANOTHER GAME
7 (Y+N)"
510 PRINT AT 21,0;"YOUR SCORE:
";S
515 INPUT A$
520 IF A$="Y" THEN RUN
530 GOTO 500
1020 FOR F=1 TO 110
1030 PRINT AT INT (RND*18)+1,INT
(RND*30)+1;"X"
1040 NEXT F
1050 FOR F=1 TO 20
1060 PRINT AT INT (RND*18)+1,INT
```

```
(RND*30)+1;"(1)"
1070 NEXT F
1075 PRINT AT 10,0;"(7kisp'1"isp
'1"isp)"
1076 PRINT AT 1,1;"(gh)"
"
JRT 2,1)"
1080 FOR F=1 TO 9
1090 PRINT AT F,10;"(isp)"
1095 NEXT F
1096 PRINT AT 9,8;" "AT 11,0;"
"
1100 SLOW
1105 RETURN
2000 FOR F=1 TO 20
2010 PRINT AT 1,1;"(1o)"AT 1,1;
"gh)"
2020 NEXT F
2030 LET S=S+100
2040 PRINT AT 21,0;"BONUS 100.YU
UR SCORE: ";S
2045 PAUSE 4E4
2050 CLS
2060 GOTO 20
9999 SAVE "EXAm"
9999 RUN
```


STAR

LOST in unknown space you meet rubbish which must be avoided at all costs, stars which you must not touch, a black hole the sides of which you must not touch, coloured fuel dumps which you must try to hit, and red booby-trapped fuel dumps which you must also avoid. Steer left with 5 and right with 8.

Star was written for the 16K Spectrum by P. Loach of Hadleigh, Suffolk.

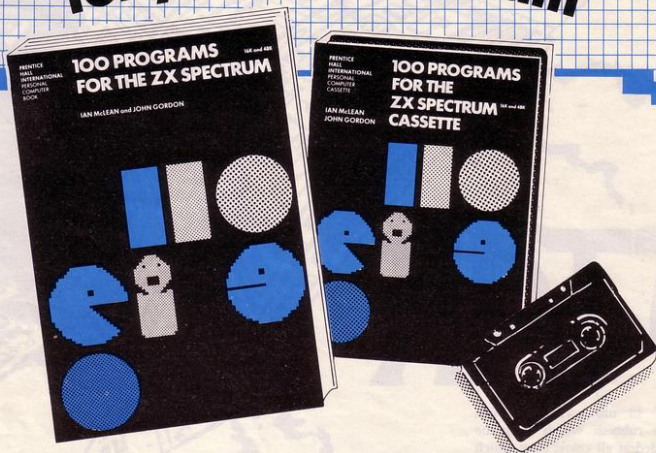


```
10 GO SUB 9000
20 FOR f=1 TO 20
30 FOR g=1 TO 22: GO SUB scrol
1: NEXT g: GO SUB 1000+1000*INT
(RND*4): NEXT f
40 INK 1: PAPER 5: FLASH 1: CL
S: FOR f=1 TO 50: BEEP .05:f: B
ORDER f/7: NEXT f: PRINT#8;"
YOU SAVED EARTH": BEEP 1:10
50 PRINT AT 1,5: FLASH 1:"Not
her game?"": FLASH 0: "You s
cared 'js'" & reached adventure
":f
60 IF INKEY$="q" OR INKEY$="y"
THEN RUN
70 IF INKEY$="n" OR INKEY$="N"
THEN GO TO 9999
80 GO TO 60
900 POKE 23692,20: PRINT AT 21,
0: RETURN
600 BEEP .01,0: LET x=x+(INKEY$
="0" AND x<30)-(INKEY$="5" AND x
>): RETURN
650 IF SCREEN$(<1,x>)" THEN R
ETURN
660 GO TO 710
700 IF ATTR(<1,x>)<8 THEN RETUR
N
710 INK 6: PAPER 2: FLASH 1: CL
S
```

```
720 FOR g=1 TO 30: BEEP .05,g:
BORDER g/7: CLS: NEXT g: GO TO
50
1000 LET p=15
1010 FOR g=1 TO 100: GO SUB scro
1: PRINT AT 0,x: INK 6:"s"
1020 PRINT AT 21,0: PAPER RND*5+
1:
":AT 21,p: PAPER 0: " ": G
O SUB move: GO SUB hit: LET s=s+
1: LET p=ABS(P-INT(RND*3))-1-(P
=25): NEXT g: RETURN
2000 INK 3: FOR g=1 TO 100: LET
s=s+1: IF RND<RND THEN PLOT 0#I
NT(RND*27),7: DRAW 39,0
2010 GO SUB scrol: PRINT AT 0,x
: INK 6:"s": GO SUB move: GO SUB
hit: NEXT g: RETURN
3000 INK 7: FOR g=1 TO 100: LET
s=s+1: GO SUB scrol: PRINT TAB
RND*31: BRIGHT 1:"*":AT 0,x: INK
6:"s":AT 21,x: BRIGHT 1:"*":AND
RND>.3: GO SUB hit: GO SUB move
: NEXT g: RETURN
4000 INK 0: CLS: FOR g=1 TO 100
: LET x=ATTR(<1,x>): LET i=INT(R
ND*5+1): GO SUB scrol: PRINT TA
B RND*31: INK 1: FLASH 1:2:"*":A
T 0,x: INK 6:"s": IF x>127 THEN
```

```
GO TO 710
4010 LET s=s+2*x: BEEP x/20,0: G
O SUB move: NEXT g: RETURN
5000 FLASH 0: BRIGHT 0: BORDER 0
: PAPER 0: INK 2: CLS
9910 LET hit=650: LET x=15: LET
scrol=500: LET move=600: LET h
it=700: LET s=0
9920 PRINT INK 6:TAB 9:"SPACE V
OYAGE"" You are lost in unknow
n space"" During your voyage vo
u will "" meet some sSpace rubbi
sh"" You must avoid this at all
cost"" Also you may meet a blac
k hole"" inside you must not t
ouch the"" sides. Also you must a
void all"" stars. Finally you sai
n fuel by"" crashing into the co
loured fuel"" dumps (■) but bewa
re, the red ""dumps are booby tr
apped"
9930 PAUSE 1: PAUSE 0: RESTORE 9
930: FOR i=0 TO 7: READ g: POKE
USR "s"+f,VAL ("BIN "+STR$ g): N
EXT f: RETURN: DATA 11111111,10
0100,111100,1100011,1111110,1111
111,0,1111110
9999 BORDER 7: PAPER 7: INK 0: F
LASH 0
```


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SPI


```

1 LET H=0
5 PRINT AT 20,0;"(32*10)"
10 LET S=0
20 LET D=10
25 LET K=0
40 LET B=2
50 LET A=INT (RND*26)+3
55 PRINT AT 0,0;S
56 PRINT AT 0,30;H
60 PRINT AT 19,D;"(92*96*91)"
"
70 LET D=D+(INKEY="B") AND D<2
80-(INKEY="S") AND D>1
90 PRINT AT 0,0;"*"
95 PRINT AT 0-1,A;" "
96 LET B=B+1
97 IF A=D+2 AND B=19 THEN GOTO
110
98 IF B=21 THEN GOTO 150
100 GOTO 60
110 LET S=S+1
120 PRINT AT 18,D+2;" "
130 GOTO 40
140 LET K=K+1
150 IF K=3 THEN GOTO 180
170 GOTO 40
180 CLS
181 PRINT "YOU HAVE FAILED TO S
AVE ALL THE PEOPLE"
182 PRINT
185 LET H=S
190 PRINT "YOU SAVED ";S;" LIVE
S"
200 PRINT
210 PRINT "ANOTHER GO?"
220 INPUT F$
222 IF F$="N" THEN STOP
225 CLS
230 GOTO 5
240 SAVE "RESCUE"
250 CLS
260 PRINT "ANY KEY TO START"
270 PAUSE 4E4
275 CLS
280 RUN

```



RIVER RESCUE

USE KEYS 5 and 8 to move the boat at the bottom of the screen to catch the people falling from the sky. When three people have drowned your score is given.

River Rescue was written by Julian North of Pontefract, West Yorkshire.



CLOCK



TONY ABRAHAMS of Camberley, Surrey wrote **Clock** for the ZX-81 16K. The program gives you a clock accurate to approximately 30 seconds an hour. That accuracy is contained in the variable "L" which equals about 50; you can adjust it to suit your machine.

Abrahams says his program disproves any accusations of Basic on a ZX-81 being too slow to support an accurate timespiece. The program uses the system variable FRAMES and may vary between individual machines. FRAMES takes 3,000 revolutions to the minute, therefore 3,000/50=one second. The clock may jump variables according to variable "L".

```

10 PAUSE 0
11 LET L=49.277
20 PRINT "INPUT THE TIME IN FO
R H:";"M:";"S:" WHERE H=HOUR(1 TO
12) AND M= MINUTE(0 TO 60)"
21 INPUT A$
23 LET H=VAL A$(1 TO 3)
30 LET M=VAL A$(4 TO )
35 PRINT "PRESS KEY TO START C
LOCK AT "H;"M;"S;"
36 LET A$=INKEY$
37 IF A$=" " THEN GOTO 36
45 CLS
46 PRINT AT 9,9;"(10*10)";TAB
9;"(10*10)";TAB 9;"(10*10)"
50 PAUSE 0
61 LET A$=PEEK 16436+256*KPEEK
16437)
71 LET S=INT (ABS ((PEEK 16436
+256*KPEEK 16437)-A$)/L)
81 IF S=60 THEN GOTO 111
91*PRINT AT 10,10;H;"M;"S;"
S
101 GOTO 71
111 LET M=M+1
121 CLS
131 IF M=60 THEN LET H=H+1
141 IF H>12 THEN LET H=1
151 IF M=60 THEN LET M=0
171 LET A$=PEEK 16436+256*KPEEK
16437)
175 PRINT AT 9,9;"(10*10)";TAB
9;"(10*10)";TAB 9;"(10*10)"
181 GOTO 71
191 SAVE "TIME"
201 RUN
202 REM approx 1 bytes

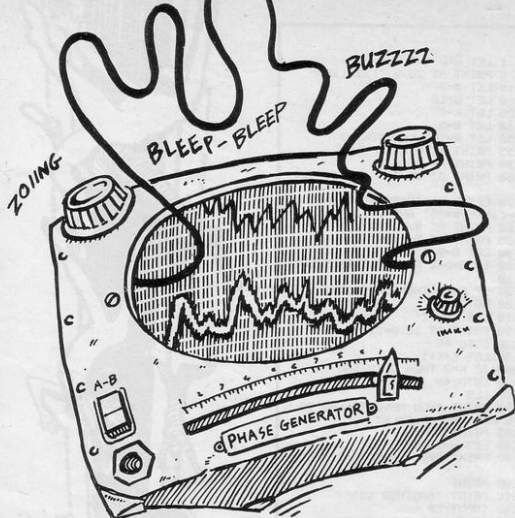
```



```

1 PRINT AT 10,5;"Phase lead a
nd lag"
2 PAUSE 100
3 CLS
4 PRINT AT 5,0;"This Program
e will help you to understand A
.C. theory and the study of wave
s. It plots graphs of sinusoidal
functions for various Phase
angles"
5 PAUSE 300
6 CLS
10 INPUT "If v=ASIN (wt+φ) typ
e angle & in multiples of PI r
adians e 0,.5,1,-.5 etc an
d ENTER";a
11 IF a=0 THEN PRINT "SIN (wt
+φ),&=";a; GO TO 15
14 PRINT "SIN (wt+φ),&=";a;"PI
"
15 FOR n=0 TO 255
20 PLOT n,88+50* SIN (n/128*PI+
a*PI)
30 NEXT n
40 INPUT "type c1 to clear scr
een or any letter to continue";
a$
50 IF a$="c1" THEN GO TO 7
60 IF a$>"c1" THEN GO TO 10

```



PHASE is a useful program for anyone studying physics, as it demonstrates the idea of phase lead and lag. It plots graphs of sinusoidal functions for various phase angles. It was written by G W Davies of Ammanford, Dyfed for the 16K Spectrum.

PHASE

BEGINNER



BEGINNER

```

1 LET S=PI-PI
2 LET A=CODE "<9a>"
10 LET A$="(<2*1sP/2*1sP/2*1sP/2
*1sP/2*1sP/2*1sP/2*1sP/2*1sP/2
15 LET B$="(<3*9a> hopbit:3*9a>"
16 PRINT AT 9,0;"SCORE:";S
20 LET B=CODE "<9t>"
30 PRINT AT 0,0;B$;AT 4,0;B$;A
T 8,0;B$
40 PRINT AT 2,0;A$
50 PRINT AT A,B;
60 LET P=VAL "PEEK (PEEK 16398
+256*PEEK 16399)"
70 LET C$=A$ TO 2)
80 LET A$=A$(3 TO 2)
90 LET A$=A$+C$
100 PRINT AT A,B;"<1 >";AT A,B;
" "AT 6,0;A$
101 LET A=A-(<2 AND INKEY$="8")-
(<INKEY$="5")
103 IF A=0 THEN GOTO 1000
110 IF P<0 THEN GOTO 30
120 GOTO 120
1000 LET S=VAL "S+1"
1010 GOTO 2

```

USE KEYS "5" for left and "8" for right to move on to the floating logs and lily pads as you make your way across the river. Use key "7" to jump. Press the break key to return after the game is over.

Hoppitt for the 16K ZX-81 was written by Mark McLeod of Aylesbury, Bucks.

CAVEMAN

CAVEMAN is for the 1K ZX-81 by A Chetwode of Ramsbury, Wilts. You are a caveman hunting in the woods for supper. You throw stones at birds passing overhead with key "P". Twenty-five birds fly overhead at different angles and your score is shown.

```

1    1 LET S=0
2    2 READ A=0
3    3 FOR A=1 TO 25
4    4 CLS
5
6    40 LET H=16
7
8    80 IF A=0 THEN GOTO 1 (RND=S))
9
10   95 FOR B=0 TO 20
11   100 NEXT B
12
13   125 PRINT AT 15,14," "
14
15   150 PRINT AT 20,14," "
16
17   175 IF H=16 THEN LET H=15
18
19   130 IF H=16 THEN LET H=15
20
21   PRINT AT H,16," "
22
23   500 IF B=14 AND H=F THEN GOTO 1
24
25   500 IF B=14 AND H=F THEN GOTO 1
26
27   500 IF INKEY$="P" OR H=16 THEN
28   600 GOTO 1000
29
30   300 PRINT AT F,B," "
31
32   370 NEXT A
33
34   500 NEXT A
35
36   700 PRINT AT 20,15," "
37
38   1000 PRINT AT H,16," "
39
40   1100 CLS
41
42   1200 RETURN
43
44   1300 LET S=1
45
46   1555 PRINT AT M,1," "
47
48   1565 PRINT AT M,2," "
49
50   1575 PRINT AT M,3," "
51
52   1585 PRINT AT M,4," "
53
54   1595 PRINT AT M,5," "
55
56   1605 PRINT AT M,6," "
57
58   1615 PRINT AT M,7," "
59
60   1625 PRINT AT M,8," "
61
62   1635 PRINT AT M,9," "
63
64   1645 PRINT AT M,10," "
65
66   1655 PRINT AT M,11," "
67
68   1665 PRINT AT M,12," "
69
70   1675 PRINT AT M,13," "
71
72   1685 PRINT AT M,14," "
73
74   1695 PRINT AT M,15," "
75
76   1700 CLS
77
78   1750 LET S=1
79
80   1800 NEXT A
81
82   1800 PRINT AT 20,15," "

```



BEGINNER

THE OBJECT of **Sniper-Fire** is to destroy the target on your right as many times as possible. You select your range, then control your aim with "A"=UP, "Z"=DOWN and "NEWLINE"=FIRE

It was written by James Knowles of Aldershot, Hampshire for 16K ZX-81.

```

10 LET M=0
20 PRINT AT 0,0;"WHAT RANGE 5-
30"
30 INPUT E
40 IF E>=31 OR E<=4 THEN GOTO
20
45 CLS
50 LET A=10
60 LET B=24
70 LET C=0

```

```

80 LET D=0
90 PRINT AT 5,21;"MISSES..."D
100 PRINT AT 7,21;"HITS...."D
110 PRINT AT 3,21;"RANGE..."E
120 PRINT AT 10,21;"HIGH...."

```

```

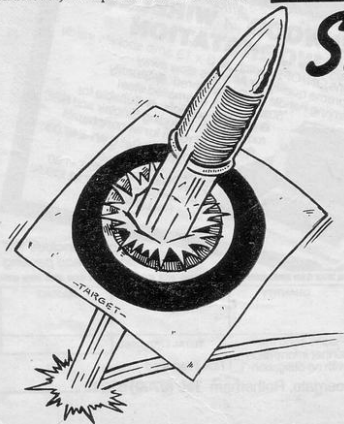
M
130 PLOT 0,A
140 PLOT E,B
150 UNPLOT 0,A
160 UNPLOT E,B
170 IF INKEY#CHR# 118 THEN GOT
0 220

```

```

180 LET F=INT (RND*2)
190 IF F=0 THEN LET B=B+1
200 IF F=1 THEN LET L=A
210 LET A=A+K*KEY$="A")-(INKEY
  #2)
215 GOTO 130
220 FOR N=1 TO E
225 PLOT E,B
230 PLOT N,A
240 UNPLOT N,A
250 IF N=E AND A=B THEN GOTO 28
0
260 IF N=E AND A>B THEN GOTO 3
40
270 NEXT N
280 FOR N=1 TO 5
290 PRINT AT 0,0;"hit"
300 PRINT AT 0,0;" "
310 NEXT N
320 LET D=D+1
330 GOTO 90
340 FOR N=1 TO 5
350 PRINT AT 0,0;"miss"
360 PRINT AT 0,0;" "
370 NEXT N
380 LET C=C+1
390 IF C=4 THEN GOTO 410
400 GOTO 90
410 IF D=M THEN LET M=D
420 CLS
430 GOTO 20

```



BEGINNER

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```

1 REM ****COCONUT CLIMBER****
5 REM ***set up variables***
6 POKE 23658,8
10 PAPER 6: BURDER 6: CLS
20 FOR A=0 TO 7: READ B: POKE
USR "a",a,b: NEXT a
30 DATA 24,24,255,24,24,36,66,
8
40 LET X=5: LET Y=31
50 LET C=5: LET D=31
60 LET SC=0
62 GO SUB 400
65 PRINT AT 14,3;"ENTER YOUR S
KILL LEVEL(1-3)"
70 PAUSE 0: LET J=VAL INKEY#
75 IF J<1 OR J>3 THEN GO TO 6
5
80 LET J=J*15
90 CLS
100 REM *****Print screen*****
110 PRINT AT 0,0: INK 4:("SP:19
2:3X199:191:SP:192:3X199:191:SP:
192:3X199:192:SP:192:3X199:191:SP:
P:192:3X199:191:SP:)"
120 PRINT AT 1,0: INK 0: " 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
130 PRINT AT 17,0: INK 0: "-----
"
140 FOR A=18 TO 21
150 PRINT AT A,0: PAPER 1: "
"
160 NEXT A
190 PRINT AT C,D: " "
200 PRINT AT X,Y: "a"
202 PRINT AT 0,0: INK 4:("SP:19
2:3X199:191:SP:192:3X199:191:SP:
192:3X199:192:SP:192:3X199:191:SP:
P:192:3X199:191:SP:)"
203 PRINT AT 21,0: PAPER 1: INK
7: "NUMBER OF COCONUTS=": SC
205 LET C=X: LET D=Y
210 LET X=X+1
220 IF X<16 OR X<-16 THEN GO S
UB 300
225 PAUSE 4
230 IF X=17 THEN GO SUB 320
240 IF X=20 THEN GO TO 900
250 IF X=1 OR X=-1 THEN GO SUB
340
259 IF SC=0 THEN GO TO 262
260 LET G=SC/15: IF G=INT G THE
N PRINT AT 1,0: " 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
261 LET G=SC/J: IF G=INT G THEN
PRINT AT 17,0: "
"
270 IF Y<0 THEN LET Y=0
280 IF Y>31 THEN LET Y=31
290 GO TO 190
300 LET Y=Y+(INKEY#="P")-(INKEY
#="Q")
310 RETURN
320 IF SCREEN#(X,Y)="-" THEN
LET X=X-X
330 RETURN
340 IF SCREEN#(X,Y)="#" THEN
LET SC=SC+1
350 RETURN
400 PRINT " INSTRUCTIONS
"
410 PRINT " COCONUT CL
IMBER"
420 PRINT " BY N
IGEL HURST"
430 PRINT " YOU HAVE TO COLLEC
T COCONUTS BYBOUNCING UP AND DOW
N ON THE STEPPING STONES.YOU
GET A NEW SET OF COCONUTS WHEN Y
OU CLEARED"
440 PRINT "THE SCREEN,THE STONE
S DISAPPEAR AS YOU BOUNCE ON THE
M ,BUT YOU GET NEW STONES EVERY
SO OFTEN DEPENDING ON YOUR SK
ILL."
450 RETURN
900 PRINT AT 10,10: FLASH 1: BR
IGHT 1:"YOU DROWNED"

```



Coconuts

COLLECT as many **Coconuts** your skill level. Bounce left with P and as possible by bouncing on the move right with Q. Written for the 16K Spectrum by Nigel Hurst of Upper Hartfield, East Sussex.

A NEW WORLD OF ADVENTURE

BLACK CRYSTAL



BLACK CRYSTAL A THIRD CONTINENT SERIES ADVENTURE

The Classic, six program adventure game for the 48K Spectrum and 16K ZX81 computers. No software collection is complete without it. "Black Crystal" an excellent graphics adventure and a well thought out package. "Sinclair User, April '83" "Black Crystal" has impressed me by its sheer quantity and generally high quality of presentation. I am afraid I have become an addict!" *Home Computing Weekly, April '83* Spectrum 48K 180K of program in six parts only £7.50
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WHY PAY MORE FOR LESS OF AN ADVENTURE?

ADVENTURES OF ST. BERNARD

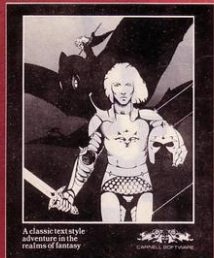


THE ADVENTURES OF ST. BERNARD

An exciting, fast moving, machine code, arcade game where you guide your intrepid St. Bernard through the perils of the icy wastelands to rescue his Mistress from the clutches of the abominable snowman.

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Enter the realm of Myth and Magic in this classic Fantasy Adventure. Battle with Magma and her Evil Allies to rescue the Elfin Princess Imprisoned in a Crystal Coffin Deep within the Volcanic Dungeon. Random Dungeon set ups ensure that you can play this addictive adventure over and over again. Single key entry cuts out tiresome typing associated with other Text Adventures. Instruction Manual with Map of Dungeon enclosed.

"The whole game mechanism makes for a very Addictive Program, and one that remains a firm favourite with many Adventurers."

Popular Computing Weekly, June 1983

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A classic text style
adventure in the
realm of fantasy

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THE CRYPT



THE CRYPT by Stephen Renton

Prepare yourself for the many challenges that shall confront you when you dare to enter **THE CRYPT**. You will battle with giant scorpions, Hell spawn, Crabs, Pos - Negs and if you are unlucky enough — the Dark Cyclops in this arcade style adventure.

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STARFORCE ONE

Take on the robot guardians of the central computer in a superbly stylised three dimensional battle game (100% machine code arcade action)

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DEVIL RIDES IN



THE DEVIL RIDES IN

I uttered the last incantations as the clock struck thirteen. All fell silent except for a faint rustling in the corner. From out of the shadows they came, all Hell's fury against me but I was not defenseless until the Angel of Death, astride a winged horse, joined the battle. Avoiding his bolts of hell fire, I took careful aim. My chances were slim, but my luck held.

(Fast moving, machine code, all action, Arcade game)

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The first born has been destroyed. The Black Crystal of Beroth has been banished. The alliance of Evil has been defeated by the armies of Lord Fendal. So ends the Third Age. Now we invite you to write your name in the history of the Fourth Age of the Third Continent.

You will meet friends and enemies, old and new, in the long awaited sequel to Volcanic Dungeon. Using high resolution graphics and combining the best qualities of "Black Crystal" and "Volcanic Dungeon", we will allow you to become part of this tale of revenge.

"The Wrath of Magra" comes as three, 48K programmes on cassette, boxed with instruction manual and book detailing the history of the Third Continent and the many spells you will be using throughout the game. For the 48K Spectrum @ £12.50.

NOTE: "The Wrath of Magra" is a complete adventure. You need not buy "Volcanic Dungeon" or "Black Crystal" to play it.

Available from Feb '84



CARNELL SOFTWARE LTD

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Aircraft in the distance signal
They're nearer... nearer... line up
your own machine guns and open fire
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Without any knowledge of machine code whatsoever



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48K SPECTRUM

crumble! — you're the Zanghat commander of the cosmic battleship of fearful power and destructiveness, the Death Cruiser. You're entrusted with the task of defending the galactic corridors of your home planet against a new kind of alien invader — a super intelligent breed of bioelectrical beings whose prodigious capacity for strategical logic make them potent adversaries indeed! "Death Cruiser" is more than just a game. In it you enter an alarmingly different world, in which the awesome new adversarial potential of true Artificial Intelligence seeks to dominate.

SPECIFICATIONS: 48K Spectrum, 100% Machine Code, arcade action • Ultra-smooth hi-res graphic animation • Kempston joystick compatible • Unique multimedia intelligence routines: omnidirectional firing • Hi-score, on-screen display.

Design by
Portland Artists

To: NOBLE HOUSE SOFTWARE, 29 Kingbride Terrace, Inverness, Scotland
Please send me ☐ Death Cruiser/s

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USE THE CURSOR keys to climb the ladders, slide down the mine shafts and avoid the monsters, the escaped pit trucks, the rotting planks, and the mysterious moving wall. Collect the gold and the picks and then proceed to the bottom right-hand corner to move to the next level.

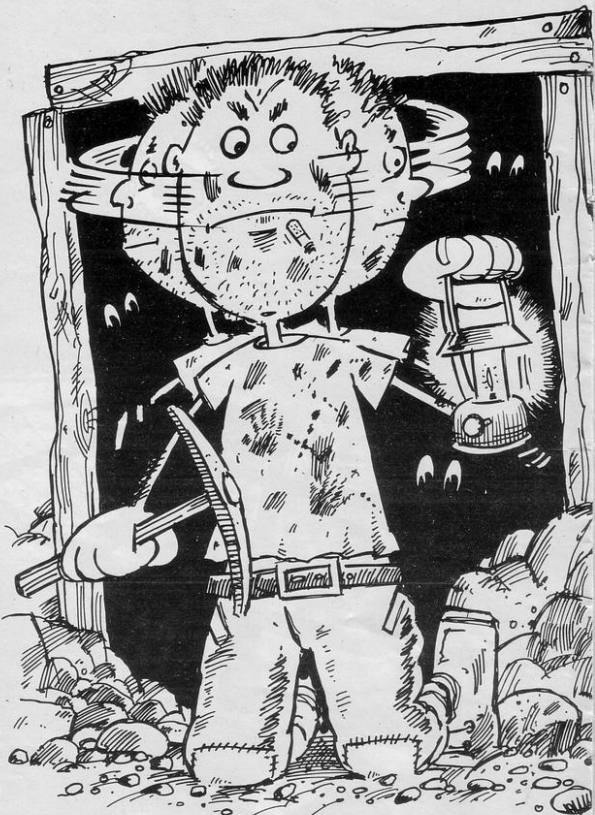
To enter, type-in the first program, RUN it, then type CLEAR. Type 'SAVE' "Builder" LINE 1', VERIFY it and then type NEW. Enter the second program, save it with SAVE "Builder" line 9999 and VERIFY it. **Builder** can then be LOADED as one program.

Written for the 16K Spectrum by Ian McNair of Kingston-upon-Thames, Surrey.

```

1 BORDER 1: PAPER 1: INK 7: C
LEAR PRINT AT 10,9: FLASH 1: "P
LEASE WAIT"
10 DATA "A",187,187,0,238,238,
0,119,119
15 DATA "B",56,60,25,126,132,6
0,36,36
20 DATA "C",28,164,170,116,88,
92,124,56
25 DATA "E",0,112,20,48,120,12
4,60,24
30 DATA "F",0,255,171,213,255,
0,0,0
35 DATA "G",0,0,0,255,255,255,
126,60
40 DATA "H",66,126,66,66,66,12
6,66,66
45 DATA "I",76,88,120,120,88,7
6,64,64
50 DATA "L",126,62,14,6,6,14,6
2,126
55 DATA "U",30,6,2,0,0,2,6,30
100 FOR F=1 TO 10: RESTORE 5+5*
F: READ F$: FOR N=0 TO 7: READ A
: POKE USR F$+N,A: NEXT N: NEXT
F
110 BURDER 0: PAPER 0: INK 7: C
LEAR
120 LOAD ""
9998 REM FOR MAIN PROGRAM TYPE
CLEAR: SAVE "BUILDER" LINE 99
99
9999 CLEAR: SAVE "BUILDER" LINE
1

```



BUILD


```

1 PAPER 0: BORDER 0: INK 3: C
LS: DIM z(6): DIM zmk(10): FOR
f=1 TO 6: LET z(7-f)=100+100*f:
LET zmk(f)="SPECTRUM": NEXT f
10 DIM p(1): DIM p(2): LET o(1)
=13: LET p(1)=5: LET o(2)=8: LE
T p(2)=27: CLS: LET she=1: LET
s=0: FOR m=3 TO 1 STEP -1: LET
o(1)=p(1)+1: LET o(2)=p(2)+1:
OVER 0: PRINT AT 5,5: "MEN: "m
": "AT 6,5: "SCORE: "s": "AT
7,5: "SHEETS: "she": "AT 1
0,4: "PRESS ANY KEY TO PLAY"
20 IF INKEY<">" THEN GO TO 2
0

```

```

30 IF INKEY=" " THEN GO TO 30
100 BORDER 0: INK 7: OVER 0: CL
S: PRINT #1: TAB 9: "By Ian McN
air" BORDER 1: RESTORE 9990: RE
AD a: FOR f=1 TO a: READ b,c,d:
PRINT AT b,c,d: FOR h=1 TO g: PR
INT INK 2: "a": NEXT h: NEXT f
101 INK 6: RESTORE 9992: READ a

```

```

FOR f=1 TO a: READ b,c,d: FOR
h=1 TO g: PRINT AT b,c,d: LET
b=b+1: NEXT h: NEXT f
102 INK 5: RESTORE 9994: READ a
FOR f=1 TO a: READ b,c,d: PRINT
AT b,c,d: "a": NEXT f
103 INK 2: RESTORE 9996: READ a
FOR f=1 TO a: READ b,c,d: PRINT
AT b,c,d: "a": NEXT f
104 INK 4: RESTORE 9998: READ a
FOR f=1 TO a: READ b,c,d: PRINT
AT b,c,d: "a": NEXT f
109 FOR o=1 TO 2: PRINT AT o(o)
,p(o): OVER 1: INK 8: "c": NEXT o

```

```

FOR f=3 TO 10: PRINT AT f,1: "
": NEXT f: FOR f=8 TO 17: PRINT
AT f,26: "": NEXT f
110 INK 2: PLOT 0: OR DRAW 255,0
DRAW 0,175: DRAW -255,0: DRAW
0,-175: LET bon=0: LET sta=4: LE
T ax=0: LET x=1: LET d=0: LET
y=29: INK 5: PRINT AT x,y: "AT
21,14: INK 4: "MEN: "m": "SCORE: "
s
199 FOR f=19 TO 21: PRINT AT f
,30: INK 6: "h": NEXT f

```

```

200 FOR v=40 TO 0 STEP -2: PRIN
T AT 0,2: OVER 0: "TIME: "INT v":
": FOR f=14 TO 20: PRINT AT 19,
f: OVER 1: BRIGHT 1: INK 6: "g":A
T 16,-12+f: "g"
281 OVER 1: GO SUB 300: PRINT A
T 6,23: "BONUS: "bon:AT 7,23: "PIC
KS: "axe: IF INKEY="0" THEN IF
ATTR (x,y)=0 THEN LET bon=bon+1
10: PRINT OVER 1:AT x,y: INK 6:
"e"

```

```

292 IF INKEY="0" THEN IF ATTR
(x,y)=4 THEN LET ax=axe+1: PR
INT OVER 1: INK 6:AT x,y: "i"
285 IF x=19 AND y=f OR x=16 AND
y=12+f THEN GO TO 290
252 GO SUB 900: PRINT AT 16,-1
2+f: OVER 1: INK 6: "g":AT 19,f:
"9"

```

```

260 NEXT f: LET v=v-2: PRINT AT
0,2: OVER 0: "TIME: "INT v":
": FOR f=28 TO 14 STEP -1: PRINT AT
19,f: OVER 1: INK 7: BRIGHT 1:
"9":AT 16,-12+f: "9"
265 IF x=19 AND y=f OR x=16 AND
y=12+f THEN GO TO 290
289 OVER 1: GO SUB 300: PRINT A
T 6,23: "BONUS: "bon:AT 7,23: "PIC
KS: "axe: IF INKEY="0" AND ATTR
(x,y)=5 THEN LET bon=bon+10: P
RINT OVER 1:AT x,y: INK 7: "e"

```

```

230 IF INKEY="0" AND ATTR (x,y
)=4 THEN LET ax=axe+1: PRINT
OVER 1:AT x,y: INK 7: "i"
299 PRINT AT 19,f: OVER 1: INK
6: "g":AT 16,-12+f: "g": GO SUB 95
0: NEXT f: NEXT v: GO TO 290
300 PRINT AT x,y: BRIGHT 8: PAP
ER 8: INK 8: "b": LET x=x+1 AND
ATTR (x+1,y)=7: IF INKEY=" " TH
EN GO TO 310

```

```

301 LET x=y+1: INK 8: "b": AND AT
T R (x+1,y)=6: INKEY="7" AND AT
T R (x+1,y)=6: LET y=y+1: INKEY="8
" AND ATTR (x,y+1)<2: INKEY="5"
AND ATTR (x,y+1)<2)
310 IF ATTR (x,y)<4 THEN GO TO
290

```

```

311 IF x=15 AND y=13 OR x=15
AND y=18 THEN LET x=x+1
312 PRINT OVER 1:AT x,y: INK 8:
PAPER 8: BRIGHT 8: "b": OVER 0:
IF INKEY="8" THEN IF x=19 THE
N IF y=29 THEN GO TO 900

```

```

313 IF x=19 AND y=28 AND ax=0
THEN IF INKEY="0" THEN LET ax
=axe+1: GO SUB 970
320 GO SUB 500: RETURN

```

```

500 FOR o=1 TO 2: LET di=RD: P
RINT AT o(o),p(o): OVER 1: INK 8:
BRIGHT 0: "c": LET o(o)=o(o)+d
1:7 AND ATTR (o(o)+1,p(o))=6: (d
<4,5 AND ATTR (o(o)-1,p(o))=6)
581 LET o(o)=p(o)+d1:65 AND y
p(o) AND ATTR (o(o),p(o))<2)
<d1<5 AND p(o)>4 AND ATTR (o
(o)-1,p(o))<2: IF ATTR (o(o)+1,
p(o))=7 THEN LET o(o)=o(o)+1
550 PRINT AT o(o),p(o): OVER 1:
INK 8: "c": IF o(o)=x AND y=p(o)
THEN GO TO 900

```

```

570 NEXT o: RETURN
9500 IF RAND=5 THEN RETURN
9505 OVER 0: LET rd=INT (RAND*2)
1: IF rd=2 THEN PRINT AT 9,25:
INK 3: BRIGHT 1: "f":AT 11,25: "f"
AT 8,7: "f":AT 10,25: INK 7: BRI
GHT 0: "f":AT 15,13: "f":AT 14,13:
INK 3: BRIGHT 1: "f":AT 16,20: "f"
AT 6,7: "f":AT 6,5: BRIGHT 0: I
NK 7: "f":AT 7,15: "f":AT 8,10: "f"
AT 20,7: "f":AT 20,11: INK 2: "f"
9510 IF rd=1 THEN PRINT AT 9,25
: INK 7: "f":AT 11,25: "f":AT 8,7:
" " BRIGHT 1: INK 3:AT 10,25: "f"
:AT 15,13: "f": BRIGHT 0: INK 7:
AT 14,13: "f":AT 16,20: "f":AT 6,7
: INK 3: BRIGHT 1:AT 6,5: "f"
:AT 7,15: "f":AT 8,10: "f":INK 7:
BRIGHT 0:AT 20,11: "f":AT 20,7:

```

```

INK 2: "a"
9530 OVER 1: RETURN
9600 CLS: FOR f=1 TO 6: PRINT A
T 0,f:2: "f": "f": "f": "f": "f": "f":
(f): NEXT f: FOR f=1 TO 6: IF x<
z(f) THEN NEXT F
9601 IF F%6 THEN LET F=6
9602 IF 5%2(F) THEN GO TO 9640
9603 NEXT F
9604 FOR f=0 TO 400: NEXT f: GO
TO 9700

```

```

9640 LET FFF=F
9641 IF 5%2(FFF) THEN GO TO 9604
9650 PRINT AT FFF,2:4: OVER 1: FL
ASH 1: " " INPUT
T "NAME: "zmk(FFF): IF LEN zmk
(FFF)>10 THEN GO TO 9650
9651 BEEP .5,0: LET zmk(FFF)=zmk
(FFF)

```

```

9690 PRINT AT x,y: FLASH 1: PAPE
R 2: INK 6: "b": FOR f=0 TO 100:
BEEP .05,50-f: NEXT f: BEEP .05,
-50: NEXT m

```

```

9700 OVER 0: PRINT AT 15,9: FLAS
H 1: "GAME OVER: FOR f=8 TO 40
H: GO SUB 900: PRINT AT 15,9: FLAS
H 1: "GAME OVER: FOR f=0 TO 40
0: NEXT f: PRINT AT 17,6: "PRESS
- "AT 19,6: "P...PLAY: "AT 2
0,6: "A...ABOUND: "AT 21,6: "S
...SCORE TABLE": PAUSE 0: PAUSE
0: IF INKEY="a" OR INKEY="s" T
HEN GO TO 9600

```

```

9701 PAUSE 0: LET as=INKEY: IF
"as"=p OR "as"=p THEN GO TO 10
9702 IF as="a" OR as="s" THEN R
ANDOMIZE USR 0
9703 IF as="a" OR as="s" THEN G
O TO 9600

```

```

9710 GO TO 9701
9750 IF sta=4 THEN PRINT AT 19,
29: "4"
9753 IF sta=3 THEN PRINT AT 19,
29: "3"
9754 IF sta=2 THEN PRINT AT 19,
29: "2"

```

```

9755 IF sta=1 THEN PRINT AT 19,
29: "1"
9756 LET sta=sta-1: RETURN
9800 OVER 0: FOR f=6 TO 15: PRIN
T AT f,6: " " NEXT
f: OVER 1: FOR f=7 TO 0 STEP -
4: BORDER f: BEEP .15,f: PRINT A
T 10,7: "WELL DONE: "AT 13,7:
"3101: "bon: NEXT f: LET s=s+
bon*2: OVER 0: PRINT AT 7,8: FLA
SH 1: "SCORE: "s: FOR f=50 TO
50: BEEP .05,f: NEXT f: LET she=
she+1

```

```

9810 DATA 1,0,0,1,0,1: RESTORE 9
815: FOR f=1 TO 3: BEEP .2,1: PR
INT OVER 1:AT x,y: INK 8: "b": R
EAD n:m: LET y=y+1: LET x=x+1: P
RINT OVER 1: INK 8:AT x,y: "b":
BEEP .3,f: NEXT f
9820 GO TO 20

```

```

9990 DATA 20,7,16,5,11,4,8,10,5,
5,13,0,13,12,27,5,11,14,12,13,19,
7,15,19,3,16,22,9,19,0,13,18,18,
14,17,0,19,15,0,17,20,14,50,4,2
2,10,9,20,12,4,0,18,2,26,6,6,1,1
3,8,1,13

```

```

9991 REM
9992 DATA 19,19,23,2,16,16,4,18,
2,13,19,13,3,14,19,4,16,8,3,15,6,
3,3,19,3,11,27,5,12,22,4,9,8,4,
10,12,3,5,14,6,3,6,3,7,2,6,3,21,
6,3,18,4,0,30,4,1,25,3

```

```

9993 REM
9994 DATA 12,3,20,20,2,26,6,20,9
20,12,7,3,9,6,10,10,8,28,10,21,
10,23,14,7
9995 REM
9996 DATA 4,3,23,16,18,19,29,19,
31

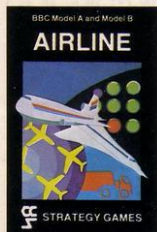
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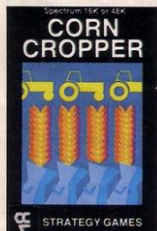
9997 REM
9998 DATA 4,3,2,7,6,12,19,13,28
9999 BORDER 0: PAPER 0: INK 5: C
LS: FOR f=0 TO 40: BEEP .009,f:
BEEP .009,f+5: NEXT f: RUN

```

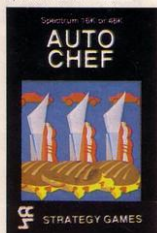

PLANE SAILING



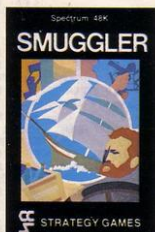
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Spectrum 16K or 48K
AIRLINE A wing and a prayer will not be enough to turn your £3 million to £30 million in the time allowed, but your financial wizardry will enable you to take over British Airways, or will it? Runs on ZX81 16K — £5 and Spectrum 16K/48K — £6.



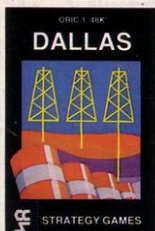
CORN CROPPER Limited cash and droughts are two of the problems facing the farmer. Planting, fertilizing and harvesting must all be done economically if you are to reap the rewards offered in corn cropper. Runs on ZX81 16K — £5 and Spectrum 16K/48K — £6.



AUTO CHEF You have a million in capital and need to increase this to £25 million in the shortest time possible. Inflation, strikes, sluggish markets are only some of the hazards to overcome. Runs on ZX81 16K — £5 and Spectrum 16K/48K — £6.



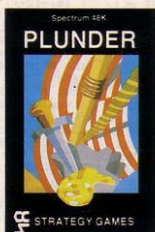
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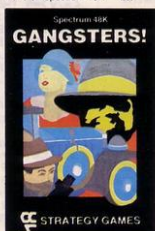
DALLAS Can you amass enough petro dollars to take over the Euing empire. Cut throat business and an eye for the main chance may get you there but you'll need nerves of steel to become the oil king of Dallas. Runs on ZX81 16K — £5 and Spectrum 16K/48K — £6.



PRINT SHOP In print shop are scheduling, staffing, purchasing and quoting within this time limit will test your business acumen to the full and weekly balance sheets will prove the quality of your decision making. Runs on ZX81 16K — £5 and Spectrum 16K/48K — £6.



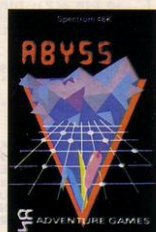
PLUNDER Can you singe the King of Spain's beard. Engage the Spanish ships on the high seas survive their broadsides and plunder the gold destined for the Armada and you might get your Knighthood before Francis Drake. Runs on Spectrum 48K — £6.



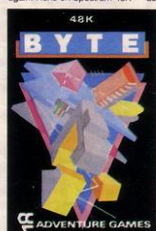
GANGSTER Are you cold hearted and callous enough to warrant the title of Don? You need to be if you are to rise to the top of the pile. A quick finger finger and an even quicker brain are needed to control the mobs and their rackets. Runs on Spectrum 48K — £6.



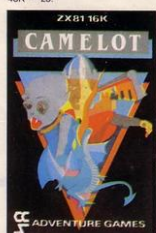
BRITISH LOWLAND You are given a racing start for your small sports car company but you have an overdraft to repay and a workforce to be kept happy. Steer your way to success with careful management and industrial relations. Runs on Spectrum 48K — £6.



ABYSS Can you journey across the long forgotten Abyss and outwit the evil monsters that lurk in the shadows awaiting the foolhardy and careless adventurer. There are many bridges and many monsters. Will you be the one to make the Abyss safe to cross again. Runs on Spectrum 48K — £5.



BYTE Complete the ten circuits you need to build your computer system then return home. Easy. Byte has sent its electronic monsters to harry you through this three dimensional maze of circuitry, if any of them catch you... Runs on Spectrum 48K — £5.



CAMELOT As the banished Arthur Pendragon you must find seven treasures without falling prey to the Brigands, Dragons and Evil Magicians that stand in your way and make a triumphant return to Camelot to be crowned King. Runs on ZX81 16K — £5 and Spectrum 48K — £5.

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Cases Computer Simulations Ltd., 14 Langton Way, London SE3 7TL.



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FLITE

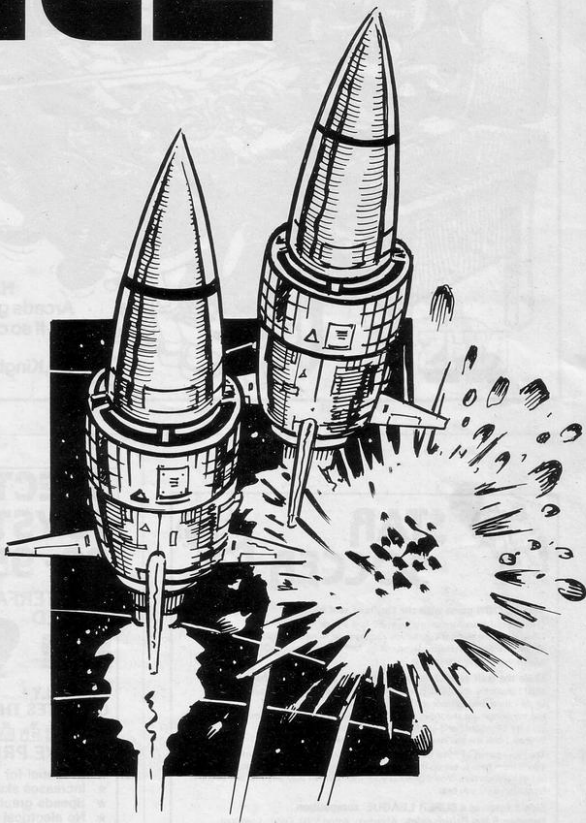
FLITE is an addictive dodge 'em game. You must avoid the deadly heat-seeking missiles heading for you and at the same time you must try and hit an enemy target to gain points.

Flite was written by Peter Davies of Streatham, London for the 16K Spectrum.

```

10 FOR n=0 TO 15: READ a: PUKE
USR "a"+n,a: NEXT n
20 DATA 0,62,65,127,65,127,65,
62,0,62,127,127,127,127,62
25 BORDER 1: PAPER 6: CLS
30 PRINT INK 9;"          " DODG
ER""""Dodge the " : INK 5;"(ga)
" : INK 9;"'s and the " : INK 4;"^
" : INK 0;"'s""""Hit the " : INK
2;"(gh)" : INK 0;"'s to score Poi
nts""""Control Keys UP....
...""""DOWN
...""""Z""
40 LET hs=0: LET mx=INT (RND*2
0)+6: LET mv=20
44 PRINT AT 21,0: INK 0;" PRE
SS ANY KEY TO START" : PAUSE 1e3
45 CLS : LET s=0: LET l=3
50 FOR n=1 TO 100
55 LET x=1+INT (RND*91): LET y
=1+INT (RND*20)
60 IF SCREEN# (y,x)="" THEN G
O TO 55
70 PRINT AT y,x: INK 2;"(ga)" :
NEXT n
80 FOR n=1 TO 20
85 LET x=1+INT (RND*31): LET y
=1+INT (RND*20)
90 IF SCREEN# (y,x)="" THEN G
O TO 85
100 PRINT AT y,x: INK 5;"(ga)" :
NEXT n
110 PRINT AT 21,0:"SCORE "s):AT
21,12:"LIVES >>>":AT 21,23:"H1
"/hs
115 PRINT AT 21,10+1;" "
120 LET x=0: LET y=0
130 IF SCREEN# (y,x)="" THEN G
O TO 200
150 PRINT AT y,x:">"
155 GO SUB 400
160 IF INKEY#="" THEN LET y=y
+y<20): LET s=1: GO TO 190
170 IF INKEY#="I" THEN LET y=y
-y>0): LET s=0: GO TO 190
180 LET x=x+1: IF x=32 THEN LE
T x=1: PRINT AT y,31;" " : GO TO
190
185 LET z=2
190 PRINT AT y+(z=0)-(z=1),x-(z
=2):" " : GO TO 190
200 IF ATTR (y,x)=48 THEN GO T
O 150
205 IF ATTR (y,x)<50 THEN GO
TO 210
206 LET s=s+10: IF s/1000=INT (
s/1000) THEN GO TO 300
207 PRINT AT 21,6:s: BEEP .01,2
0: GO TO 150
210 PRINT FLASH 1:AT y,x;"(ga)
" : FLASH 0: PRINT AT 21,17+1;" "
: LET l=l-1: IF l=0 THEN GO TO

```



```

240
220 BEEP .01,0: GO TO 120
240 IF hs<5 THEN LET hs=5
250 PRINT AT 21,25:hs
260 PRINT AT 11,0: FLASH 1: INK
3:"Another Go ? (y/n)"
270 IF INKEY#="" THEN GO TO 4
5
275 IF INKEY#="" THEN STOP
280 GO TO 270
300 RESTORE 320: FOR n=1 TO 16:
READ a: BEEP .1,1: NEXT n
310 CLS : GO TO 50
320 DATA 0,12,2,10,3,6,4,7,7,4,


```

```

8,3,10,2,12,0
400 IF mv<20 THEN PRINT AT mv+
1,mx:" "
401 IF SCREEN# (mv,mx)="" THEN
GO TO 210
405 IF SCREEN# (mv,mx)="" THEN
LET mx=RND*20+6: BEEP .01,40: L
ET mv=20: RETURN
410 PRINT AT mv,mx: INK 4;"^" :
LET mv=mv-1
420 IF mv=0 THEN PRINT AT mv+1
,mx:" " : LET mx=RND*20+6: LET mv
=20: RETURN
430 RETURN

```


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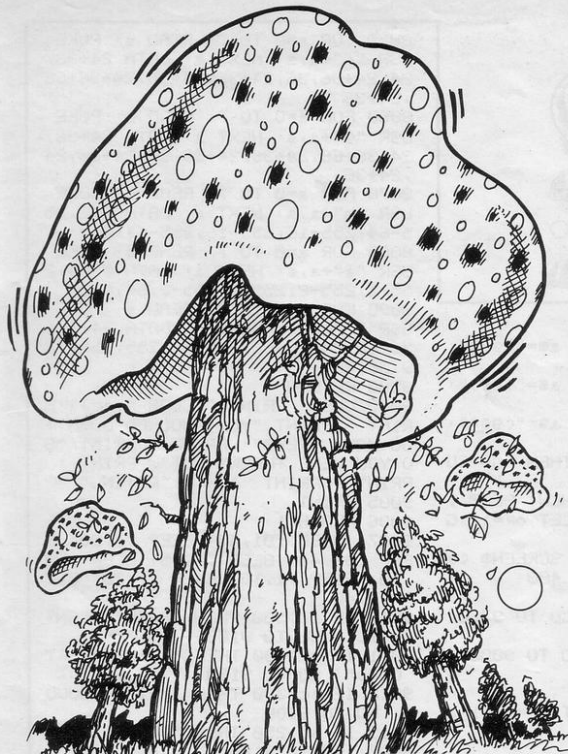
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TREE EATERS

TREE EATERS for the 16K Spectrum was written by A Beardmore of Stoke-on-Trent, Staffs. Stop the Martians eating our forests for the vital resources they lack on their planet.

```

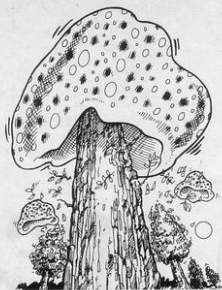
1 BORDER 0: PAPER 0: INK 6: C
LS
2 PRINT "YOU(9a) MUST KILL TH
E MARTIAN TREE EATERS "; INK
2: "9p"; INK 6: " AT ALL COSTS"; P
RINT "BUT DON'T KNOCK DOWN THE T
REES"; PRINT: PRINT "0=UP, K=DO
WN, S=RIGHT, A=LEFT. "; PRINT:
PRINT "BUT CAREFUL YOU HAVE NO B
RAKE"
3 PRINT AT 21,0;"PRESS ANY KE
Y TO START GAME"
15 GO SUB 0000: PAUSE 0
16 FOR a=0 TO 21: INK 2
17 PRINT AT a,0;"
": NEXT a
20 PRINT AT 1,1: INK 6;"(30*9a
)";AT 21,1;"(30*9b)"
21 INK 6
25 FOR a=2 TO 20: PRINT AT a,0
;"(9c)";AT a,21;"(9d)": NEXT a
29 LET a=0
30 PRINT AT INT (RND*19)+2,INT
(RND*30)+1: INK 4;"(9e)": LET a

```

```

=a+1: IF a<80 THEN GO TO 30
40 PRINT AT 9,14;"(9a)";AT 9,1
6;"(9a)";AT 12,14;"(3*9b)"
50 FOR a=10 TO 11: PRINT AT a,
13;"(9c)";AT a,17;"(9d)": NEXT a
PRINT AT 8,14: INK 2;" "
55 PRINT AT 0,1;"SCORE:=0
TREES KILLED:=0 "
60 LET x=0
65 LET sc=0: LET tr=0
70 LET a$="(99)"
80 LET op=0: LET a=11: LET s=1
5
85 LET q=INT (RND*19)+2: LET w
=INT (RND*30)+1
86 PRINT AT q,w: INK INT (RND*
30)+1;"(9p)"
100 PRINT AT a,s)a$
120 IF INKEY$="a" THEN LET x=1
130 IF INKEY$="s" THEN LET x=2
140 IF INKEY$="o" THEN LET x=3
150 IF INKEY$="k" THEN LET x=4
155 PRINT AT a,s: INK 2;" "
170 IF x=1 THEN LET a$="(9h)":

```

```

LET s=s-1
171 IF x=2 THEN LET a$="(91)":
LET s=s+1
172 IF x=3 THEN LET a$="(9f)":
LET a=a-1
173 IF x=4 THEN LET a$="(99)":
LET a=a+1
175 IF ATTR(a,s)=6 THEN GO SU
B 410: LET op=1
176 IF a=a AND s=s THEN BEEP .
.05,.40: LET sc=sc+10: LET op=1: G
O SUB 500: GO TO 85
177 IF op=0 THEN IF SCREEN$(a
,s)<>" " THEN GO SUB 400
178 LET op=0
180 IF sc>500 THEN GO TO 9700
200 PRINT AT a,s:a$
210 IF tr>15 THEN GO TO 9000
250 LET op=0
300 GO TO 100
405 BEEP .09,-.20: LET tr=tr+1:
GO SUB 500
406 RETURN
410 IF x=1 THEN LET s=s+1
411 IF x=2 THEN LET s=s-1
412 IF x=3 THEN LET a=a+1
413 IF x=4 THEN LET a=a-1
420 PRINT AT a,s:a$: RETURN
500 PRINT AT 0,0:sc:AT 0,20:tr
510 RETURN
8000 FOR a=0 TO 7: READ s: POKE
USR "a"+a,s: NEXT a: DATA 0,0,0
,0,24+36,128+64+3,255,255
8010 FOR a=0 TO 7: READ s: POKE
USR "b"+a,s: NEXT a: DATA 255,25
5,128+64+3,24+36,0,0,0,0
8020 FOR a=0 TO 7: READ s: POKE
USR "c"+a,s: NEXT a: DATA 7,7,11
,11,11,11,7,7
8030 FOR a=0 TO 7: READ s: POKE
USR "d"+a,s: NEXT a: DATA 128+64
+32,128+64+32,128+64+16,128+64+1
6,128+64+16,128+64+16,128+64+32,
128+64+32
8040 FOR a=0 TO 7: READ s: POKE
USR "e"+a,s: NEXT a: DATA 24,24+
36+2,24+36+66,255-129,24+36,24,2
4,24

```

```

8050 FOR a=0 TO 7: READ s: POKE
USR "f"+a,s: NEXT a: DATA 24+36,
24,24+36,36,24+36,24+36,24+36+66
,24+36
8060 FOR a=0 TO 7: READ s: POKE
USR "g"+a,s: NEXT a: DATA 24+36,
24+36+66,24+36,24+36,36,24+36,24
,24+36
8070 FOR a=0 TO 7: READ s: POKE
USR "h"+a,s: NEXT a: DATA 0,2,25
5-64,255-16,255-16,255-64,2,0
8080 FOR a=0 TO 7: READ s: POKE
USR "i"+a,s: NEXT a: DATA 0,64,2
55-2,255-8,255-8,255-2,64,0
8090 FOR a=0 TO 7: READ s: POKE
USR "p"+a,s: NEXT a: DATA 24,24+
36+66,24+36+66,255-36,255,255-12
9,36,36
8500 RETURN
9000 CLS: PRINT "SCORE":sc: P
RINT: PRINT "YOU KNOCKED DOWN T
OO MANY TREES": PRINT: PRINT "S
O YOU WERE THROWN OUT": PRINT:
PRINT: PRINT INK 7:"RATING"
9005 PRINT
9006 FLASH 1
9007 BEEP .01,40: BEEP .1,20: B
EEP .02,40: BEEP .1,15: BEEP .03
,40: BEEP .1,10: BEEP .1,20: BEE
P .1,40
9010 IF sc>500 THEN PRINT "FANT
ASTIC": GO TO 9100
9011 IF sc>400 THEN PRINT "VERY
GOOD": GO TO 9100
9012 IF sc>300 THEN PRINT "GOOD
": GO TO 9100
9013 IF sc>250 THEN PRINT "NOT
BAD": GO TO 9100
9014 IF sc>200 THEN PRINT "BAD"
: GO TO 9100
9015 IF sc>150 THEN PRINT "VERY
BAD": GO TO 9100
9016 IF sc>100 THEN PRINT "OLD
GRANNY": GO TO 9100
9017 IF sc>0 THEN PRINT "FORGE
T IT": GO TO 9100
9100 GO TO 9500
9500 FLASH 0: PRINT AT 21,0:"AND
THER GUY/N)"
9600 IF INKEY$="" THEN GO TO 95
00
9610 IF INKEY$="y" THEN RESTORE
: GO TO 1
9620 IF INKEY$="n" THEN GO TO 9
999
9630 GO TO 9500
9700 CLS: BEEP .05,40: BEEP .05
,30: BEEP .05,50: BEEP .1,30: BE
EP .1,40: BEEP .1,20: PRINT "YOU
HAVE KILLED ALL THE MAR
TIAN TREE EATERS..WELL DONE..":
BEEP .01,30: BEEP .01,30: BEEP .
01,30: GO TO 9500

```


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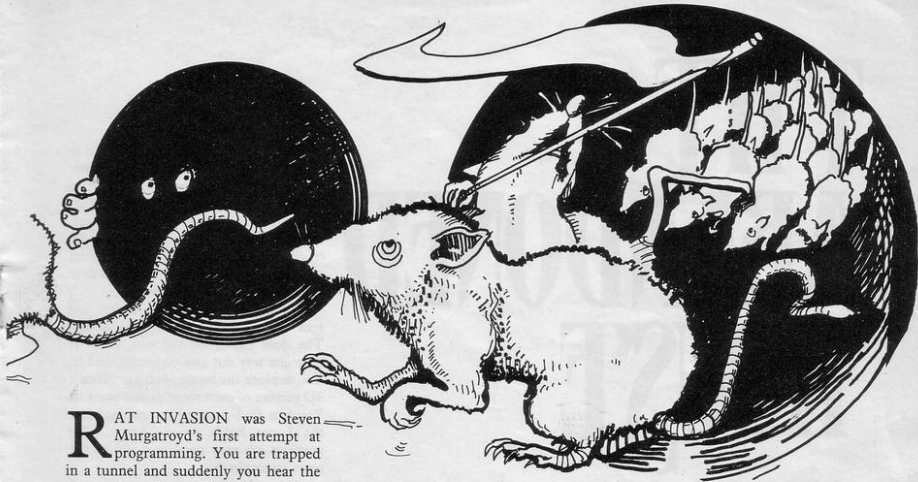
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```

10 PRINT AT 0,0;"RAT INVASION"
11 PRINT AT 1,0;"(12%97)"
12 PRINT AT 4,0;" YOU ARE TRAP
PED IN A DARK CAVE AND YOU HEAR
THE FOOTSTEPS OF SMALL ANIMALS
... rats. YOU HAVE NO WEAPONS YO
U MUST TRY TO GET BY WITHOUT BE
ING KILLED."
```


THE ABANDONED HOUSE

THE ABANDONED HOUSE is a 16K ZX-81 adventure game and is this month's program of the month. The author is Stephen Murgatroyd, aged 14, of Wantage, Oxon who has been programming since he received his ZX-81 in July. He is keen on adventure games and this is his first attempt at this type of game.

Caught in a fierce electric storm, you seek shelter in an abandoned house. The door closes behind you, there is only one way out and you must find it. You explore the house, you are given a 3D picture of each room as you enter it. You can find treasure or weapons but the house holds other secrets. The graphics are very good and add to the eerie atmosphere.

```

1 REM "ESCAPE"
2 FOR F=1 TO 22
3 PRINT "
4 NEXT F
5 PRINT AT 10,6;"
6 PRINT AT 11,7;"
7 PRINT AT 12,6;"
8 PRINT AT 13,7;"
9 PRINT AT 14,7;"
10 PRINT AT 15,7;"
11 PRINT AT 16,7;"
12 PRINT AT 17,7;"
13 PRINT AT 18,7;"
14 PRINT AT 19,7;"
15 PAUSE 100
16 PRINT AT 0,30;"
17 PRINT AT 1,29;"
18 PRINT AT 2,28;"
19 PRINT AT 3,27;"
20 PRINT AT 4,26;"
21 PRINT AT 5,25;"
22 PRINT AT 6,24;"
23 PRINT AT 7,23;"
24 PRINT AT 8,22;"
25 PAUSE 15
26 CLS
28 FAST
29 FOR F=1 TO 22
30 PRINT "
31 NEXT F
32 PRINT AT 6,6;"STEPHEN MURGA
TROYD"
33 PRINT AT 8,9;"PRESENTS"
34 PRINT AT 12,3;"

```

```

35 PAUSE 200
40 CLS
50 SLOW
55 PRINT AT 0,5;"ESCAPE"
56 PRINT AT 1,5;"
60 PRINT AT 2,0;" YOU ARE TRAP
PED IN AN ENORMOUS STORM,AND YOU
A CAR HAS BROKEN DOWN.YOU WALK
ALONG A ROAD LOOK-ING FOR A HOU
SE."
65 PRINT AT 6,0;" FINALLY YOU
FIND ONE AND KNOCK ON THE DOOR..
....."
80 PRINT AT 18,0;"PRESS ANY KE
Y"
85 IF INKEY$="" THEN GOTO 85
88 CLS
90 PRINT AT 0,0;"THE DOOR OPEN
S YOU ENTER THERE IS NO T
URNING BACK....."
91 PRINT AT 4,0;"THERE IS MAGI
C GOLD IN THE HOUSEWHICH WILL HE
LP YOU ESCAPE."
92 PRINT AT 7,0;"FIND THE WEAP
ONS FOR THEY WILL HELP YOU SURV
IVE."
95 PRINT AT 10,0;"THE HOUSE IS
FILLED WITH MANY HORRORS.YOU
MUST TRY TO ESCAPE"
96 PRINT AT 14,0;" THE GOLD AN
D WEAPONS ARE WORTH SOME MONEY S
O LOOK AFTER THEM."
100 PRINT AT 18,0;"PRESS ANY KE
Y TO BEGIN"
105 IF INKEY$="" THEN GOTO 105
109 CLS
300 LET S=100
310 LET G=0
320 LET W=0
500 CLS
505 SCROLL
505 SCROLL
510 LET A$="A LIBRARY."
520 LET B$="A HALL."
530 LET C$="A LOUNGE."

```




```

531 LET D$="A KITCHEN."
532 LET E$="A CELLER."
533 LET G$="A KITCHEN."
534 LET H$="A BEDROOM."
540 LET A=INT (RND*7)+1
550 IF A=1 THEN LET F$=B$
560 IF A=2 THEN LET F$=A$
570 IF A=3 THEN LET F$=C$
580 IF A=4 THEN LET F$=D$
582 IF A=5 THEN LET F$=E$
584 IF A=6 THEN LET F$=G$
586 IF A=7 THEN LET F$=H$
595 GOSUB 659
600 SCROLL
602 SCROLL
610 IF F$=A$ THEN GOSUB 700
620 IF F$=B$ THEN GOSUB 800
630 IF F$=C$ THEN GOSUB 900
631 IF F$=D$ THEN GOSUB 800
632 IF F$=E$ THEN GOSUB 700
634 IF F$=G$ THEN GOSUB 900
636 IF F$=H$ THEN GOSUB 700
640 SCROLL
650 SCROLL
659 FAST
660 CLS
661 PRINT AT 5,5;" "
662 PRINT AT 19,5;" "
663 FOR Z=0 TO 4
664 PRINT AT Z,Z;" "
665 NEXT Z
666 LET X=0
667 FOR Z=29 TO 25 STEP -1
668 PRINT AT X,Z;" "
669 LET X=X+1
670 NEXT Z
671 LET X=4
672 FOR Z=20 TO 21
673 PRINT AT Z,X;" "
674 LET X=X-1
675 NEXT Z
676 LET X=25
677 FOR Z=20 TO 21
678 PRINT AT Z,X;" "
679 LET X=X+1
680 NEXT Z
681 FOR Z=6 TO 15
682 PRINT AT Z,5;" "
683 NEXT Z
684 PRINT AT 20,8;"YOU ARE FACI
NG "
685 SLOW
686 PAUSE 100
690 RETURN
700 PRINT "(1) EXPLORE (2) LOOK
FOR TRAPS"
710 INPUT U
720 IF U=1 THEN GOSUB 1000
730 IF U=2 THEN GOSUB 1100
735 SCROLL
736 SCROLL
740 GOTO 510
800 PRINT "(1) EXPLORE (2) LEAV
E"
810 INPUT E
820 IF E=1 THEN GOSUB 1000
830 IF E=2 THEN GOSUB 1300
833 SCROLL
836 SCROLL
840 GOTO 510
900 PRINT "(1) EXPLORE (2) REST
(3) LEAVE"
910 INPUT O
920 IF O=1 THEN GOSUB 1000
930 IF O=2 THEN GOSUB 1400
940 IF O=3 THEN GOSUB 1300
943 SCROLL
946 SCROLL
950 GOTO 510
1000 SCROLL
1005 SCROLL
1010 LET A=INT (RND*4)+1
1020 IF A=1 THEN GOSUB 1500
1030 IF A=2 THEN GOSUB 1600
1040 IF A=3 THEN GOSUB 1700
1041 IF A=4 THEN GOSUB 1320
1042 SCROLL
1043 SCROLL
1050 RETURN
1100 SCROLL
1101 LET A=INT (RND*2)+1
1103 IF A=1 THEN PRINT "THERE AR
E NO TRAPS HERE."
1104 IF A=2 THEN GOSUB 1107
1105 PAUSE 80
1106 RETURN

```



```

1107 PRINT "YOU FIND ONE WHICH L
EADS TO"
1108 SCROLL
1110 PRINT "ANOTHER ROOM."
1111 PAUSE 80
1112 SCROLL
1114 SCROLL
1120 RETURN
1300 SCROLL
1310 RETURN
1315 SCROLL
1320 PRINT "THERE IS NOTHING HER
E."
1330 PAUSE 80
1340 RETURN
1400 SCROLL
1401 LET A=INT (RND*2)+1
1402 IF A=1 THEN PRINT "YOU REST
AND THEN MOVE ON."
1403 IF A=2 THEN GOSUB 1405
1404 PAUSE 80
1405 RETURN
1406 PRINT "WHILE RESTING A THIE
F COMES BY"
1407 SCROLL
1408 PRINT "AND TAKES YOUR GOLD
AND WEAPONS."
1409 LET G=G-G
1410 LET U=U-U
1411 PAUSE 80
1413 SCROLL
1414 SCROLL
1420 RETURN
1500 GOSUB 659
1501 SCROLL
1510 PRINT "YOU HAVE FOUND SOME
GOLD."
1511 PRINT AT 14,8;"
1512 PRINT AT 15,8;"
1513 PRINT AT 16,8;"
1514 PRINT AT 17,8;"
1515 PRINT AT 18,6;"
1516 PAUSE 100
1520 LET G=G+20
1530 LET S=S+10
1531 IF S>350 THEN GOTO 1800
1532 SCROLL
1534 SCROLL
1540 RETURN
1500 FAST
1510 CLS
1615 LET A=INT (RND*3)+1
1620 IF A=1 THEN LET M$="
1630 IF A=2 THEN LET M$="
1640 IF A=3 THEN LET M$="

```

```

1645 PRINT "YOU HAVE MET A ";M$
1648 PAUSE 80
1650 CLS
1651 SLOW
1655 PRINT "HAVE YOU A WEAPON ?"
1656 IF U=0 THEN GOTO 2115
1650 IF U<1 THEN GOTO 1660
1665 PRINT "YES"
1670 LET U=U-1
1675 PRINT "YOU HAVE KILLED IT"
1680 GOTO 510
1700 GOSUB 659
1701 SCROLL
1710 PRINT "YOU HAVE FOUND A WEAP
ON"
1711 PRINT AT 9,14;"
1712 PRINT AT 10,14;"
1713 PRINT AT 11,14;"
1714 PRINT AT 12,14;"
1715 PRINT AT 13,14;"
1716 PRINT AT 14,14;"
1717 PRINT AT 15,14;"
1718 PRINT AT 16,14;"
1719 PRINT AT 17,14;"
1720 PRINT AT 18,14;"
1725 LET U=U+1
1730 LET S=S+10
1740 IF S>350 THEN GOTO 1800
1745 SCROLL
1750 SCROLL
1760 RETURN
1800 CLS
1820 PRINT AT 5,10;"YOU HAVE"
1830 PRINT AT 8,0;"
1840 PAUSE 100
1845 CLS
1850 PRINT AT 5,0;"WELL DONE YO
U HAVE FINALLY AND THANKFULLY ES
CAPED FROM THE HOUSE AND ITS
MONSTERS.";AT 8,0;"DURING YOUR
ESCAPE YOU TOOK £";G*5;"000 WO
RTH OF GOLD AND £";U*5;"000 WORT
H OF WEAPONS."
1851 PRINT AT 14,0;"WOULD YOU LI
KE TO BECOME EVEN"
1855 PAUSE 9999
1860 IF INKEY$="N" THEN GOTO 190
0
1870 IF INKEY$="" THEN GOTO 1850
1870 IF INKEY$="Y" THEN GOTO 20
0
1900 CLS
1910 PRINT "A WISE DECISION."
1920 STOP
2000 CLS
2010 PRINT "GREEDY THING."
2012 PAUSE 50
2015 CLS
2020 GOTO 510
2100 CLS
2115 PRINT "BAD LUCK.YOU HAVE FA
ILED TO
2120 STOP
2130 SAVE "ESCAPE"
2140 GOTO 1

```


MAZEMAN

LOST IN a large maze, your only hope is to find the exit which is somewhere on the top left of the maze. All you can see in the darkness are the glowing sides of the passage. Move using the cursor keys.

Mazeman was written for the 16K Spectrum by P Loach of Hadleigh, Suffolk.

```

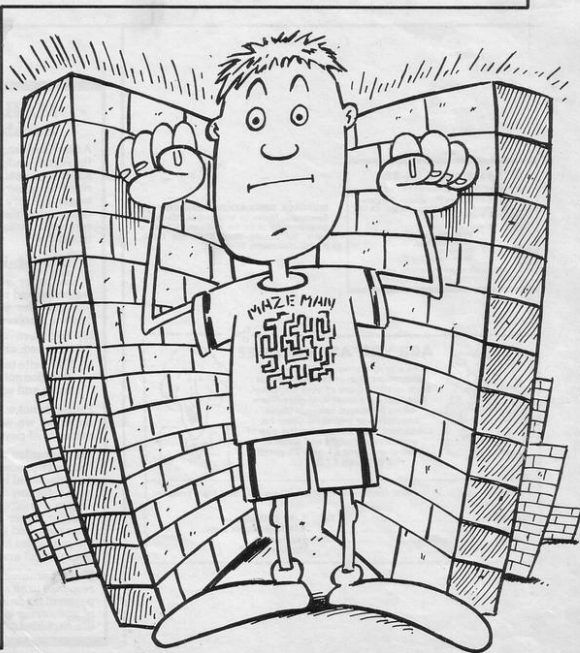
9 10 GO SUB 9000
20 LET x=INT(RND*(X+1)): LET y=
INT(RND*(Y+1)): IF m$(x,y)=""(1SP)
" OR x<1/2 THEN GO TO 20
30 LET e=INT(RND*(W-2)+2): IF
m$(e,2)=""(1SP) THEN GO TO 30
35 LET m$(e,1)="
40 IF x=1 AND m$(y,x)="" THEN
GO TO 803
50 GO SUB 7000
60 BEEP .1,RND*20: LET i=LNKE
Y$: IF i$="5" OR i$="8" THEN GO
TO 60
70 LET a=(i$="8")-(i$="5"): LE
T b=(i$="6")-(i$="7"): IF m$(x+yb
,x+a)="" THEN LET x=x+a: LET y
=y+b: GO TO 40
80 PRINT#6: FLASH 1: INK 2: P
APER 6:"YOU WALKED INTO A WALL":
FOR F=1 TO 200: OUT 254,F: OUT
254,255: NEXT F: INPUT "": OUT 2
54,0: GO TO 60
7000 CLS: LET a=y-l: IF a<1 TH
EN LET a=1
7010 LET b=y+l: IF b>w THEN LE
T b=w
7020 LET c=x-l: IF c<1 THEN LE
T c=1
7030 LET d=x+l: IF d>l THEN LE
T d=l
7040 FOR e=a TO b: PRINT m$(e,c
TO d): NEXT e: RETURN
8000 FOR F=1 TO 50: PAPER RND*7:
OUT 254,RND*7: OUT 254,255: CLS
: NEXT F: BORDER 7: PAPER 7: IN
K 0: CLS
8010 PRINT AT 9,6: FLASH 1:"YOU
FOUND THE EXIT": PRINT cu:"ANOTH
ER GO ?"
8020 IF INKEY$=""Y" OR INKEY$="Y"
THEN RUN
8030 IF INKEY$="N" OR INKEY$="n"
THEN GO TO 9999
8040 GO TO 8020
8999 REM MAZE & INSTRUCTIONS
9000 PAPER 5: INK 0: BORDER 5: C
LS: RESTORE 903: READ 1,w
9010 PRINT TAB 7,"MAZEMAN": "Yo
u are lost in a large maze. Y
our only hope of escape is to fi
nd the exit, which is hidden so
mewhere in the left hand" "corne
r. All you can see in the dark
passages is the glowing corne
rs of the tunnel." "To move, use
the cursor keys."
9020 DIM m$(w,l): FOR f=1 TO w:
READ m$(f): NEXT f: INK 6: PAPER
0
9030 INPUT "Enter level 1-9 (9 i
s easiest)": l: IF l<1 OR l>9
OR l>INT l THEN GO TO 9030
9040 LET l=INT l: BORDER 0: CLS
: RETURN: DATA 32,24,"32*1SP"

```

```

9050 DATA "(1SP:7*SP:1SP:6*SP:10
*1SP:2*SP:5*1SP)"
9060 DATA "(1SP:5*SP:1SP:SP:1SP:
SP:1SP:1SP:1SP:2*SP:3*1SP:9*SP:2*
1SP:2*SP:1SP)"
9070 DATA "(1SP:5*SP:1SP:3*SP:1S
P:SP:1SP:3*SP:5*1SP:6*SP:2*1SP:2
*SP:1SP)"
9080 DATA "(1SP:SP:13*1SP:2*SP:4
*1SP:10*SP:1SP)"
9090 DATA "(1SP:SP:1SP:17*SP:1SP
:6*SP:1SP:3*SP:1SP)"
9100 DATA "(1SP:SP:1SP:2*SP:3*1S
P:SP:10*1SP:SP:1SP:6*SP:5*1SP)"
9110 DATA "(3*1SP:2*SP:1SP:6*SP:
2*1SP:13*SP:1SP:3*SP:1SP)"
9120 DATA "(1SP:SP:1SP:2*SP:3*1S
P:SP:2*1SP:SP:2*1SP:3*SP:2*1SP:SP
P:1SP:10*SP:1SP)"
9130 DATA "(1SP:SP:1SP:2*SP:1SP:
3*SP:1SP:7*SP:2*1SP:4*SP:1SP:5*SP
P:3*1SP)"
9140 DATA "(1SP:SP:1SP:6*SP:1SP:
SP:4*1SP:2*SP:5*1SP:2*SP:2*1SP:4
*SP:1SP:SP:1SP)"
9150 DATA "(1SP:SP:8*1SP:SP:1SP:
2*SP:1SP:2*SP:4*1SP:2*SP:2*1SP:4
*SP:1SP:SP:1SP)"
9160 DATA "(1SP:13*SP:1SP:14*SP:
1SP:SP:1SP)"
9170 DATA "(12*1SP:2*SP:16*1SP:SP
:1SP)"
9180 DATA "(1SP:10*SP:1SP:2*SP:5
*1SP:12*SP:1SP)"
9190 DATA "(1SP:SP:8*1SP:1SP:1SP:
12*SP:3*1SP:4*SP:1SP)"
9200 DATA "(1SP:3*SP:3*1SP:2*SP:
1SP:SP:1SP:2*SP:1SP:3*SP:7*1SP:SP
P:1SP:4*SP:1SP)"
9210 DATA "(1SP:6*SP:3*1SP:2*SP:
1SP:SP:1SP:SP:1SP:5*SP:1SP:SP:1S
P:4*SP:1SP)"
9220 DATA "(1SP:SP:6*1SP:SP:1SP:
4*SP:1SP:SP:1SP:SP:1SP:12*SP:1SP
)"
9230 DATA "(1SP:8*SP:1SP:4*SP:1S
P:3*SP:1SP:SP:8*1SP:3*SP:1SP)"
9240 DATA "(4*1SP:SP:5*1SP:21*SP
:1SP)"
9250 DATA "(1SP:2*SP:1SP:8*SP:6*
1SP:4*SP:7*1SP:2*SP:1SP)"
9260 DATA "(1SP:6*SP:6*1SP:7*SP:
2*1SP:7*SP:1SP)"
9270 DATA "(32*1SP)"

```



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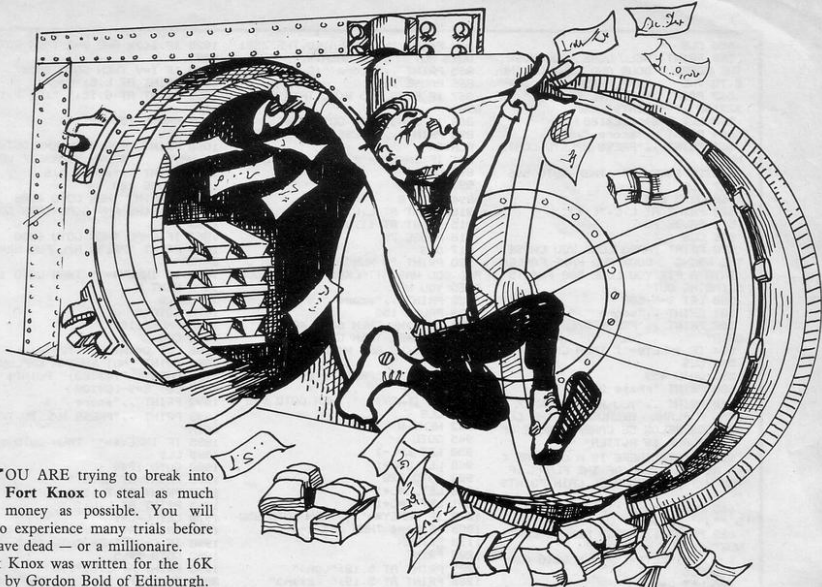
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YOU ARE trying to break into Fort Knox to steal as much money as possible. You will have to experience many trials before you leave dead — or a millionaire.

Fort Knox was written for the 16K ZX-81 by Gordon Bold of Edinburgh.

FORT KNOX

```

2 LET AG=0
3 LET HS=0
4 LET NS=""
5 GOSUB 5000
6 PRINT "HOW MANY PLAYERS?"
7 INPUT PL
8 LET S=0
9 FOR W=1 TO PL
10 PRINT "Player ";W
11 LET S=S+1
12 PAUSE 75
13 CLS
14 PRINT "fort knox 11"
15 PRINT AT 0,14:"high score="
16
17 PRINT AT 1,14:"name:- ";NS
18 PRINT AT 2,14:"age:";AG
22 PRINT AT 5,7:"INSTRUCTIONS?
(Y/N)"
23 INPUT I$
24 IF I$="N" THEN GOTO 100
25 IF I$="Y" THEN GOTO 30
30 PRINT AT 5,7:"instructions
33 PRINT "YOU ARE TRYING TO
BREAK INTO A SPECIAL BANK WHICH
CONTAINS OVER100,000,000.YOU W
ILL HAVE TO
34 PRINT "OVERCOME MANY DANGER
S ON YOUR WAY TO THE VAULT.DUR
ING THE GAMEYOU GAIN AND LOSE PO
INTS."
35 PRINT "YOU ARE REPRESENTED
BY AN "G"
40 PRINT "IF YOU COMPLETE A TR
SK SUCCESSFULLY YOU WIL
L CHANGE TO AN <(10)>,IF NOT YOU
WILL CHANGE TO AN <(1X)>."
80 PRINT "PRESS N/L TO CONTI
NUE"
90 IF INKEY="" THEN GOTO 90
100 CLS
109 LET A=INT (RND*3)+1
110 PRINT "Phase11"

120 PRINT "THERE ARE 3 PASSAGE'S
WHICH LEAD TO THE VAULT.1 OF TH
E PASSAGES HAS AN ALARM"
140 PRINT "TYPE IN WHICH PASSAG
E (1 TO 3)"
150 INPUT C
170 PRINT
180 PRINT AT 7,0)("<X>99:1SP:SP:
1SP:2X99:1SP:SP:1SP:2X99:1SP:SP:
1SP:11X99)"
182 FOR F=1 TO 7
184 PRINT ("<X>9h:1SP:SP:1SP:2X9
h:1SP:SP:1SP:2X9h:1SP:SP:1SP:11X
9h)"
185 NEXT F
186 PRINT AT 15,0)("<X>9f:1SP:SP
:1SP:2X9f:1SP:SP:1SP:2X9f:1SP:SP
:1SP:11X9f)"
190 IF C=1 THEN LET Y=9
200 IF C=2 THEN LET Y=14
210 IF C=3 THEN LET Y=19
220 LET X=6
230 PRINT AT X,Y;" "
240 LET X=X+1
250 IF X=15 THEN GOTO 300
255 IF X=10 AND C=A THEN GOTO 3
50
260 PRINT AT X,Y;"0"
270 GOTO 230
300 PRINT AT X,Y;"<(10)>"
302 PAUSE 75
305 CLS
306 LET Q=INT (RND*30)+10
308 PRINT "YOU HAVE ELUDED THE
ALARM AND "
310 PRINT "HAVE GAINED ";Q*100
;" POINTS"
330 GOTO 400
350 PRINT AT X,Y;"<(1X)>"
352 PAUSE 75
354 CLS
355 PRINT "YOU HAVE BEEN ARREST
ED BY A"
360 PRINT "POLICEMAN,YOU LOSE 5
00 POINTS AFTER BRIBING HIM"
365 LET S=S-500
368 PRINT "score ";S
370 PRINT "PRESS N/L TO TRY A
GAIN"
380 IF INKEY="" THEN GOTO 380
390 GOTO 100
400 LET S=S*(Q*100)
405 PRINT "score ";S
410 PRINT "PRESS N/L TO CONTI
NUE"
420 IF INKEY="" THEN GOTO 420
430 CLS
440 PRINT "Phase 2"
450 LET Z=INT (RND*6)+1
455 PRINT "YOU HAVE FOUND A K
EY AND MUST PUT IT INTO 1 OF T
HE DOORS (<(10)>). USE THE CURSOR
KEYS TO MOVE AROUND"
456 PRINT "PRESS N/L TO CONTI
NUE"
457 IF INKEY="" THEN GOTO 457
458 CLS
459 LET L=6
460 LET C=A
461 LET X=INT (RND*5)
462 LET Y=INT (RND*5)
464 PRINT AT X,Y;"<(10)>"
470 LET A=INT (RND*5)
472 LET B=INT (RND*5)
474 PRINT AT A,B;"<(10)>"
475 PRINT AT L,C;" "
477 LET L=L+(INKEY="6")-(INKEY
="7")
478 LET C=C+(INKEY="8")-(INKEY
="5")
480 IF L=X AND C=Y THEN GOTO 55
0
485 IF L=A AND C=B THEN GOTO 57
0
490 PRINT AT L,C;"0"
500 GOTO 475
550 PRINT AT L,C;"<(10)>"
555 PAUSE 75

```



```

556 CLS
560 PRINT "WELL DONE YOU CHOSE
THE CORRECT DOOR AND CAN CONTINUE
TO THE NEXT PHASE"
562 PRINT "YOU HAVE SCORED ",(Z
*2100), " POINTS"
563 LET S=S+2X2100)
564 PRINT "score ",S
565 PRINT "PRESS N/L TO CONTI
NUE"
566 IF INKEY="" THEN GOTO 566
567 CLS
568 GOTO 600
570 PRINT AT L,C;"(1*)"
575 PAUSE 75
576 CLS
578 PRINT "HARD LUCK, YOU CHOSE
THE WRONG DOOR AND HAVE FALLEN
INTO A PIT YOU LOSE 500 POINTS
CLIMBING OUT"
580 LET S=S-500
581 PRINT "score ",S
582 PRINT "PRESS N/L TO TRY A
GAIN"
584 IF INKEY="" THEN GOTO 584
585 CLS
590 GOTO 459
600 PRINT "Phase 3"
610 PRINT "YOU HAVE TO WALK A
LONG PLANK BECAUSE OF THE GUAR
D DOGS BELOW BE CAREFUL, SOME OF
THE PLANK IS ROTTEN"
612 PRINT "THERE IS A DROWBAR (
*) AT THE END OF THE PLANK, IF
YOU HIT IT YOU WILL GAIN POINTS"
615 PRINT "USE ""W"" TO WALK AN
D ""J"" TO JUMP"
620 PRINT "PRESS N/L TO CONTI
NUE"
630 IF INKEY="" THEN GOTO 630
640 CLS
700 LET L=L+4
705 LET C=C+1
710 PRINT AT 5,0;"(97.2*SP;2*97
*SP;97*SP;2*97.4*SP;97.2*SP;2*97
)"
712 PRINT AT 12,0;"(1979a)"
715 PRINT AT 4,17;"+"
720 PRINT AT L,C;"+"
730 IF INKEY="" THEN LET C=C+
1
735 IF L=L+4 AND C=C+1 OR L=L+4 AND C
=2 OR L=L+4 AND C=5 OR L=L+4 AND C=7
OR L=L+4 AND C=10 OR L=L+4 AND C=11
OR L=L+4 AND C=12 OR L=L+4 AND C=13
OR L=L+4 AND C=15 OR L=L+4 AND C=16
THEN GOSUB 960
737 IF INKEY="" THEN LET L=L+1 AND
C=C+1 THEN GOTO 850
740 IF INKEY="" THEN GOSUB 95
8
745 IF INKEY="" THEN "J" AND L<4 THEN
GOSUB 1000
747 IF INKEY="" THEN "J" AND L=L+1 AND
C=C+1 THEN GOTO 850
750 PRINT AT L,C;"(1)"
760 IF L=L+4 AND C=C+1 THEN GOTO 1
200
765 IF C=19 THEN GOTO 802
766 IF C=18 AND L<4 THEN GOTO
802
770 IF C=19 AND L=L+4 THEN GOTO 1
500
775 LET Z=INT (RND*20)+1
780 IF L=L+4 AND C=C+1 THEN LET S=
S+(Z*20)
800 GOTO 720
802 PRINT AT L,C;"(1*)"
803 PAUSE 100
804 CLS
805 PRINT "YOU HAVE JUMPED OUT
OF THE BARR"
810 PRINT "YOU LOSE 1000 POINTS"
812 LET S=S-1000
814 PRINT "score ",S
815 PRINT "PRESS N/L TO TRY A
GAIN"
820 IF INKEY="" THEN GOTO 820
825 CLS
830 GOTO 700
850 PRINT AT L,C;"(1*)"
855 PAUSE 75
860 CLS
862 PRINT "YOU CHEATED, THE ZX81
DOES NOT LIKE CHEATS."
865 PRINT "score ",S
866 PAUSE 120
867 IF S<85 AND W<PL THEN GOTO
890
868 IF S>85 THEN GOTO 4005
890 PRINT "PRESS N/L FOR NEXT
PLAYER"
891 IF INKEY="" THEN GOTO 891
892 CLS
893 NEXT W
894 GOTO 8
910 PRINT AT L,C;" "
915 PRINT AT 11,0;"(1*)"
916 PAUSE 75
917 CLS
920 PRINT "A HUNGRY ALSATIAN GU
ARD DOG HAS ATTACKED YOU AND GUB
BLED YOU UP"
922 PRINT "score ",S
923 PAUSE 150
925 IF S>85 THEN GOTO 4005
926 IF W<PL THEN GOTO 6000
930 IF S<85 AND W<PL THEN GOTO
934
934 PRINT "PRESS N/L FOR NEXT
PLAYER"
935 IF INKEY="" THEN GOTO 935
940 CLS
942 NEXT W
945 GOTO 8
960 LET L=L+1
960 LET C=C+1
960 GOTO 720
1000 LET L=L+1
1001 LET C=C+1
1002 IF INKEY="" THEN GOTO 850
1005 IF L=L+4 THEN LET L=L+4
1130 RETURN
1200 PRINT
1205 PRINT AT 5,10;"(9h)"
1216 PRINT AT 5,10;"(8*9h)"
1218 PRINT AT 6,10;"(8*9h)"
1220 PRINT AT 7,10;"(8*9h)"
1223 PRINT AT 8,10;"(8*9h)"
1224 PRINT AT 9,10;"(8*9h)"
1250 PRINT AT 10,10;"(9f)"
1260 PRINT AT 11,10;"(9f)"
1270 PRINT AT 12,10;"(10*9f)"
1280 GOTO 720
1500 PRINT AT 4,19;" "
1505 LET L=L+1
1506 LET C=C+1
1510 PRINT AT L,C;" "
1511 LET C=C+1
1512 IF C=27 THEN GOTO 1515
1513 PRINT AT L,C;"0"
1514 GOTO 1507
1515 PRINT AT L,C;"(10)"
1520 PAUSE 150
1530 CLS
1535 LET X=INT (RND*100)+1
1540 PRINT "WELL DONE, YOU HAVE G
AINED ",(X*100), " POINTS FOR FIND
ING THE CORRIDOR"
1550 LET S=S+(X*100)
1560 PRINT "score ",S
1600 PRINT "PRESS N/L TO CONTI
NUE"
1610 IF INKEY="" THEN GOTO 1610
1620 CLS
1700 PRINT "Phase 4"
1720 PRINT "THERE IS A STEEL D
OOR IN THE CORRIDOR, YOU MUST
INPUT THE AMOUNT OF EXPLOSIVE
ES TO BE USED"
1725 PRINT "(1 OR 2) TONS."
1730 PRINT "PRESS N/L TO CONTI
NUE"
1735 IF INKEY="" THEN GOTO 1735
1740 CLS
1745 PRINT AT 5,0;"(32*9h)"
1750 PRINT AT 8,0;"(32*9h)"
1755 LET L=L+7
1756 LET C=C+14
1760 PRINT AT L,C;"0"
1770 PRINT AT 6,10;"(11*9h)"
1780 PRINT AT 7,10;"(11*9h)"
1800 LET V=INT (RND*2)+1
1810 INPUT I
1820 IF I<V AND V=1 THEN GOTO 1
850
1825 IF I<V AND V=2 THEN GOTO 1
850
1855 PAUSE 100
1856 CLS
1860 PRINT "TOO MUCH EXPLOSIVE, Y
OU HAVE BLOWN YOURSELF UP"
1862 PRINT "score ",S
1863 PAUSE 120
1865 IF S>85 THEN GOTO 4005
1866 IF S<85 AND W<PL THEN GOTO
1869
1869 IF W<PL THEN GOTO 6000
1869 PRINT "PRESS N/L FOR NEXT P
LAYER"
1870 IF INKEY="" THEN GOTO 1870
1872 NEXT W
1875 CLS
1876 GOTO 8
1880 PAUSE 100
1885 CLS
1886 LET Q=INT (RND*20)+1
1888 PRINT "NOT ENOUGH EXPLOSIVE
YOU LOSE ",(Q*100), " POINTS"
1889 LET S=S-(Q*100)
1890 PRINT "score ",S
1893 PRINT "PRESS N/L TO TRY A
GAIN"
1895 IF INKEY="" THEN GOTO 1895
1896 CLS
1900 GOTO 1740
1950 PRINT AT 6,15;" "
1960 PRINT AT 7,15;" "
1965 PRINT AT L,C;" "
1970 LET C=C+1
1980 PRINT AT L,C;"0"
1990 IF C=31 THEN GOTO 1995
1992 GOTO 1965
1995 PRINT AT L,C;"(10)"
2000 PAUSE 75
2005 CLS
2010 PRINT "WELL DONE, YOU HAVE C
UT THROUGH THE STEEL DOOR AND H
AVE GAINED 2000 POINTS"
2015 LET S=S+2000
2020 PRINT "score ",S
2030 PRINT "PRESS N/L TO CONTI
NUE"
2040 IF INKEY="" THEN GOTO 2040
2050 CLS
2100 PRINT "Phase 5"
2110 PRINT "YOU ARE IN A LARGE
ROOM AND THE FLOOR WILL BECOME
ELECTRIFIED"
2120 PRINT "AFTER 100 SECONDS, YOU
MUST FIND THE HIDDEN SWITCH BE
FORE"
2130 PRINT "YOUR TIME RUNS OUT"
2132 PRINT "IF YOU TURN IT OFF I
N TIME A CORRIDOR IS PRINTED"
2133 PRINT "IF YOUR TIME RUNS OU
T THE SWITCHES ARE PRINTED"
2135 PRINT "USE THE CURSOR KEYS
TO MOVE AROUND"
2140 PRINT "PRESS N/L TO CONTI
NUE"
2150 IF INKEY="" THEN GOTO 2150
2160 CLS
2175 LET T=100
2194 LET L=L+7
2196 LET C=C+1
2200 PRINT AT 5,0;"(7*9h;10*9h;9
h)"
2210 PRINT AT 8,0;"(7*9h;10*9h;9
h)"
2220 PRINT AT 4,6;"(9h;10*9h;9h)"
2230 PRINT AT 3,6;"(9h;10*9h;9h)"
2235 PRINT AT 6,6;"(11*9h;9h)"
2240 PRINT AT 2,6;"(9h;10*9h;9h)"
2245 PRINT AT 7,6;"(11*9h;9h)"
2250 PRINT AT 1,6;"(9h;10*9h;9h)"
2260 PRINT AT 0,6;"(12*9h)"
2270 PRINT AT 9,6;"(9h;10*9h;9h)"
2280 PRINT AT 10,6;"(9h;10*9h;9h)"
2290 PRINT AT 11,6;"(9h;10*9h;9h)"

```



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2300 PRINT AT 12.6;"(9h:10sp:9h
2310 PRINT AT 13.6;"(9h:10sp:9h
2320 PRINT AT 14.6;"(129h)"
2325 LET X=INT (RND*12)+1
2326 LET Y=INT (RND*9)+7
2330 PRINT AT L,C;"Y,Y="
2335 LET T=T+1
2340 LET L=L+(INKEY="6")-(INKEY
="7")
2350 LET C=C+(INKEY="6")-(INKEY
="5")
2355 IF L=0 THEN LET L=1
2356 IF L=14 THEN LET L=13
2357 IF C=17 THEN LET C=16
2358 IF L>7 AND C<6 THEN LET C
=7
2360 IF L=X AND C=Y THEN GOTO 25
00
2365 IF C=6 THEN PRINT AT 6.6;"(
9h):AT 7.6;"(9h)"
2370 IF T=1 THEN GOTO 2600
2380 PRINT AT L,C;"0"
2390 PRINT AT 0.22;"time "TJ)"
2400 GOTO 2330
2500 PRINT AT L,C;" "
2501 PRINT AT 14.8;" "
2502 PRINT AT 15.7;"(9h:3sp:9h)"
2503 PRINT AT 16.7;"(9h:3sp:9h)"
2504 PRINT AT 17.7;"(9h:3sp:9h)"
2505 PRINT AT 18.7;"(9h:3sp:9h)"
2506 PRINT AT 19.7;"(9h:3sp:9h)"
2507 PRINT AT 20.7;"(9h:3sp:9h)"
2508 LET L=15
2509 LET C=9
2510 PRINT AT L,C;" "
2511 LET L=L+1
2512 IF L=20 THEN GOTO 2515
2513 PRINT AT L,C;"0"
2514 GOTO 2510
2515 PRINT AT L,C;"(10)"
2519 PAUSE 120
2520 CLS
2530 PRINT "YOU TURNED OFF THE S
WITCH IN TIME,YOU SCORED ";T*
160;" POINTS"
2535 LET S=S+(T*100)
2540 PRINT "score ";S
2550 PRINT "PRESS N/L TO CONTI
NUE"
2560 IF INKEY=" " THEN GOTO 2560
2565 CLS
2570 GOTO 2700
2600 PRINT AT L,C;"(1*)"
2605 PRINT AT X,Y;"="
2610 PAUSE 100
2620 CLS
2630 PRINT "YOU HAVE BEEN ELECT
RIFIED."
2640 PRINT "score ";S
2642 PAUSE 120
2645 IF S>HS THEN GOSUB 4005
2650 IF S<HS AND WCLP THEN GOTO
2653
2655 IF WMLP THEN GOTO 6000
2659 PRINT "PRESS N/L FOR NEXT
PLAYER"
2660 IF INKEY=" " THEN GOTO 2660
2670 CLS
2672 NEXT W
2680 GOTO 8
2700 PRINT "Phase 6"
2710 PRINT "YOU HAVE FINALLY R
EACHED THE VAULT.THE COMBINAT
ION WILL BE PRINTED FOR A FEW"
2720 PRINT "SECONDS,YOU MUST REM
EMBER IT AND TYPE IT IN WHEN YOU
ARE TOLD"
2735 PRINT "IF YOU INPUT THE WRO
NG COMBINATION THE CORR
ECT ONE WILLBE PRINTED"
2738 PRINT "GOOD LUCK,"
2740 PRINT "PRESS N/L TO CONTI
NUE"
2750 IF INKEY=" " THEN GOTO 2750
2760 CLS
2770 LET L=15
2780 LET C=9
2790 PRINT AT L,C;" "
2800 PRINT AT 10.6;"(9h:5sp:9h)"
2801 PRINT AT 11.6;"(9h:5sp:9h)"
2802 PRINT AT 12.6;"(9h:5sp:9h)"
2803 PRINT AT 13.6;"(9h:5sp:9h)"
2804 PRINT AT 14.6;"(9h:5sp:9h)"
2805 PRINT AT 15.6;"(9h:5sp:9h)"
2810 PRINT AT 16.6;"(9h:5sp:9h)"
2811 PRINT AT 17.6;"(9h:5sp:9h)"
2812 PRINT AT 18.6;"(9h:5sp:9h)"
2813 PRINT AT 19.6;"(9h:5sp:9h)"
2814 PRINT AT 20.6;"(9h:5sp:9h)"
2820 PRINT AT L,C;"0"
3000 LET M=INT (RND*21000)+10000
3010 PRINT AT 17.7;"M"
3020 PAUSE 25
3025 PRINT AT 17.7;" "
3027 PRINT AT 0.0;"TYPE IN COMBI
NATION"
3028 PAUSE 75
3029 PRINT AT 0.0;" "
3030 INPUT T
3040 IF T=M THEN GOTO 3500
3050 IF T<M THEN GOTO 3750
3500 PRINT AT 16.8;" "
3510 PRINT AT L,C;" "
3520 LET L=L+1
3530 IF L=20 THEN GOTO 3545
3535 PRINT AT L,C;"0"
3540 GOTO 3510
3545 PRINT AT L,C;"(10)"
3546 PAUSE 100
3550 CLS
3551 FOR F=1 TO 21
3552 PRINT "32K12"
3553 NEXT F
3554 PAUSE 100
3555 CLS
3558 LET K=INT (RND*500)+100
3560 PRINT "WELL DONE,YOU HAVE O
PENED THE VAULT AND ARE A VERY
RICH PERSON"
3565 PRINT "YOU SCORED ";K*100;"
POINTS"
3570 LET S=S+(K*100)
3575 PRINT "score ";S
3578 PAUSE 100
3580 IF S>HS THEN GOTO 4005
3585 IF S<HS THEN PRINT "PRESS
N/L FOR ANOTHER GO."
3590 IF INKEY=" " THEN GOTO 3590
3600 GOTO 5
3750 PRINT AT L,C;"(1*)"
3770 PRINT AT 15.7;"=";AT 15.10
;"<"
3780 PRINT AT 17.7;"M"
3790 PAUSE 150
3800 CLS
3810 PRINT "YOU HAVE BEEN STRABB
E BY TWO PIKES.WHAT A PITY YO
U WERE"
3820 PRINT "SO CLOSE TO THE £100
,000,000."
3830 PRINT "NEVER MIND."
3840 PRINT "score ";S
3841 PAUSE 150
3842 IF S<HS AND WCLP THEN GOTO
3850
3844 IF S>HS THEN GOTO 4005
3846 IF WMLP THEN GOTO 6000
3850 PRINT "PRESS N/L FOR NEXT
PLAYER"
3860 IF INKEY=" " THEN GOTO 3860
3870 CLS
3872 NEXT W
3880 GOTO 8
4005 CLS
4006 IF S>HS THEN LET HS=S
4008 PRINT "YOU HAVE THE HIGH SC
ORE"
4010 PRINT "INPUT NAME (1 TO 12
LETTERS)"
4015 INPUT NO
4020 IF LEN NO>12 THEN GOTO 4005
4025 IF LEN NO<12 THEN GOTO 402
6
4026 PRINT "NO"
4027 PRINT "INPUT AGE"
4028 INPUT AG
4029 PRINT "AG"
4031 PRINT "OK? (Y/N)"
4032 PAUSE 20
4033 INPUT IS
4034 IF IS="N" THEN GOTO 4036
4035 IF IS="N" THEN GOTO 4005
4036 IF WCLP THEN GOTO 4040
4037 IF WMLP THEN GOTO 6000
4040 PRINT "PRESS N/L FOR NEXT
PLAYER"
4045 IF INKEY=" " THEN GOTO 4045
4050 CLS
4052 NEXT W
4055 GOTO 8
5000 PRINT AT 0.4;"(4k1sp:3ksp:4
k1sp:3ksp:4k1sp:3ksp:3k1sp)"
5010 PRINT AT 1.4;"(1sp:6ksp:1sp
:2ksp:1sp:3ksp:1sp:2ksp:1sp:4ksp
:1sp)"
5020 PRINT AT 2.4;"(2k1sp:5ksp:1
sp:2ksp:1sp:3ksp:4k1sp:4ksp:1sp)"
5030 PRINT AT 3.4;"(1sp:6ksp:1sp
:2ksp:1sp:3ksp:1sp:1sp:1sp:1sp:1
sp)"
5040 PRINT AT 4.4;"(1sp:6ksp:4k1
sp:3ksp:1sp:sp:1sp:5ksp:2ksp)"
5050 PRINT AT 7.2;"(1sp:2ksp:1sp
:4ksp:1sp:3ksp:1sp:3ksp:4k1sp:3k
sp:1sp:3ksp:1sp)"
5060 PRINT AT 8.2;"(1sp:1sp:1sp:5
ksp:2k1sp:2ksp:1sp:3ksp:1sp:2ksp
:1sp:4ksp:1sp:sp:1sp)"
5070 PRINT AT 9.2;"(2k1sp:6ksp:1
sp:sp:1sp:sp:1sp:3ksp:1sp:2ksp:1
sp:5ksp:1sp)"
5080 PRINT AT 10.2;"(1sp:sp:1sp:
5ksp:1sp:2ksp:2k1sp:3ksp:1sp:2k
sp:1sp:4ksp:1sp:sp:1sp)"
5090 PRINT AT 11.2;"(1sp:2ksp:1s
p:4ksp:1sp:3ksp:1sp:3ksp:4k1sp:3
ksp:1sp:3ksp:1sp)"
5100 PRINT AT 14.9;"(3k1sp:2ksp:
3k1sp)"
5101 PRINT AT 15.9;"(sp:1sp:4ksp
:1sp)"
5102 PRINT AT 16.9;"(sp:1sp:4ksp
:1sp)"
5103 PRINT AT 17.9;"(sp:1sp:4ksp
:1sp)"
5104 PRINT AT 18.9;"(3k1sp:2ksp:
3k1sp)"
5106 FOR F=1 TO 3
5107 PRINT "BULDIE SOFT
WARE:"
5108 NEXT F
5109 PAUSE 150
5110 CLS
5150 RETURN
6000 CLS
6010 PRINT "WELL DONE "JH
6011 PRINT "YOU SCORE
D THE MOST POINTS AND HAVE WON
THE GAME."
6012 PRINT "YOU SCORED ";HS
6020 PRINT "PRESS N/L TO HAVE
ANOTHER GO"
6030 IF INKEY=" " THEN GOTO 6030
6040 CLS
6050 GOTO 5

```


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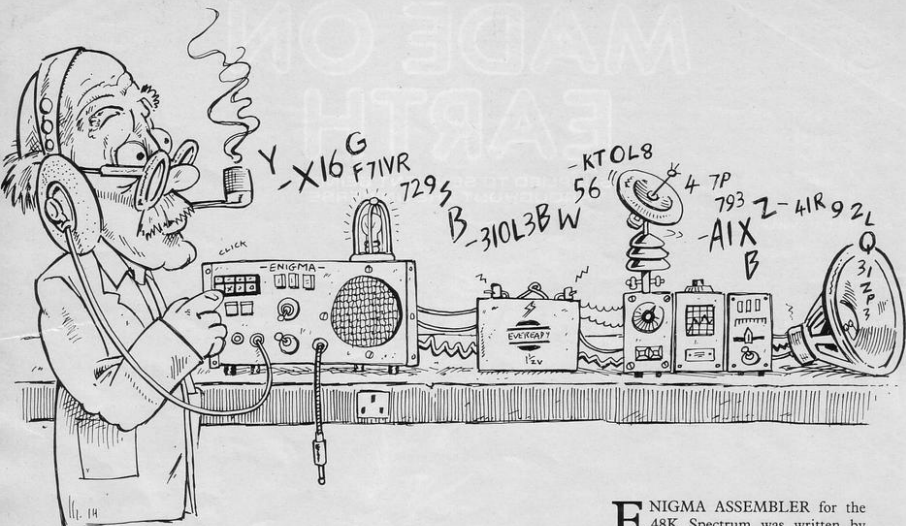
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ENIGMA ASSEMBLER

ENIGMA ASSEMBLER for the 48K Spectrum was written by Max Berle of Geel, Belgium. It will convert assembly language code, such as L D A, Z Z, into machine code, a list of numbers which can be understood by the computer. Assembly language is easier to understand from the users' point of view.

```

1 DIM a(252); DIM s(252);
2 INK 0; PAPER 7; BORDER 7; C
LS; PRINT AT 11,0; FLASH 1;"
Please wait a moment
50 GO SUB 0000
110 CLS
120 PRINT TAB 10;"Options";TAB
10;"-----"
130 PRINT; PRINT; PRINT; PRI
NT
131 BRIGHT 1
140 PRINT TAB 2;"1.....Write";
TAB 2;"2.....Look";TAB 2;"3....
..Run";TAB 0
145 PRINT AT 15,2; INK 3; PLOT
7,43; DRAW 0,17; DRAW 190,0; DR
AW 0,-17; DRAW -190,0
147 INK 0
150 PRINT #0; FLASH 1;"Please s
elect"
160 PAUSE 0; IF INKEY<"1" OR I
NKEY>"3" THEN GO TO 160
165 BRIGHT 0
170 GO TO <0000 AND INKEY="1">
+<0000 AND INKEY="2">+<0000 AND
INKEY="3">
2000 REM Write:
2100 CLS; INPUT "Start address:
";st
2015 PRINT AT 0,0;"Address: ";st
; PRINT; PRINT; PRINT; PRINT
2020 INPUT "Code: ";ys
2022 IF ys="stop" THEN GO TO 10
0
2025 IF LEN ys>12 THEN GO TO 2
050
2030 FOR f=1 TO 252; IF ys=a(f)
THEN GO TO 2100
2040 NEXT f
2050 PRINT INVERSE 1;0; FLASH
1;"Wrong input"; PAUSE 100; PRIN
T 0;
" GO TO 2020
2100 PRINT TAB 3;ys
2120 POKE st,a(f)
2121 FOR f=1 TO LEN ys
2122 IF ys(f) TO f)="N" THEN GO
TO 2125
2123 NEXT f
2124 GO TO 2130
2125 INPUT "NN: ";s
2126 IF s>255 THEN GO TO 2125
2127 LET st=st+1; POKE st,s; PRI
NT TAB 0;"N"; INVERSE 1;s
2130 LET st=st+1; GO TO 2020
4005 LET w=0
4010 CLS; INPUT "Start address:
";st
4015 PRINT AT 0,0; INVERSE 1;"Ad
resse: ";st;0; INVERSE 1;
" M menu "
4020 PRINT; PRINT; PRINT; PRI
NT
4021 FOR f=1 TO 252; IF PEEK (st
)=a(f) THEN GO SUB 4500
4022 NEXT f
4023 IF w=1 THEN LET st=st+1; P
RINT TAB 0;"N"; INVERSE 1;PEEK
(st); LET w=0
4035 IF INKEY="n" THEN GO TO 1
00
4040 LET st=st+1; GO TO 4021
4500 PRINT TAB 3;a(f)
4510 FOR f=1 TO LEN a(f)
4520 IF a(f) TO e)="N" THEN L
ET w=1; RETURN
4530 NEXT f; RETURN
5010 CLS
5020 INPUT "Start address: ";d
5030 CLS; INPUT USR d; PRINT F
LASH 1;0; Press any key"
5050 PAUSE 0; GO TO 100
0000 RESTORE
0010 FOR f=1 TO 252
0020 READ a(f);a(f)
0030 NEXT f
9010 DATA "nop",0,"ld bc,NN",1,"
ld (bc),a",2,"inc bc",3,"inc b",
4,"dec b",5,"ld b,NN",6,"rca",7,
"ex af,af",8,"add hl,bc",9,"ld
a,(bc)",10,"dec bc",11,"inc c",1
2,"dec c",13,"ld c,NN",14,"rrca",
15,"dinz DIS",16,"ld de,NN",17,
"ld (de),a",18,"inc de",19,"inc
d",20,"dec d",21,"ld d,NN",22,"l
a",23,"jr DIS",24,"add hl,de",25
,"ld a,(de)",26,"dec de",27,"inc
e",28,"dec e",29,"ld e,NN",30,"r
ra",31,"jr nz,DIS",32,"ld hl,NN",
33,"ld (NN),hl",34,"inc hl",35,
"inc h",36,"dec h",37
9020 DATA "ld h,NN",38,"dxa",39,"
jr z,DIS",40,"add hl,hl",41,"ld
hl,(NN)",42,"dec hl",43,"inc l",
44,"dec l",45,"ld l,NN",46,"cpl",

```



```

47,"JP NC,DIS",48,"ld sp,NN",49,
"ld (NN),a",50,"inc a",51,"inc
(ch)",52,"dec (hl)",53,"ld (hl),
N",54,"acp",55,"JP c,DIS",56,"
dec hl,sp",57,"ld a,(NN)",58,"dec
sp",59,"inc a",60,"dec a",61,"ld
a,N",62,"ccf",63,"ld b,b",64,"ld
b,c",65,"ld b,d",66,"ld b,e",67,
"ld b,h",68,"ld b,l",69,"ld b,
(ch)",70,"ld b,a",71,"ld c,b",72,
"ld c,c",73,"ld c,d",74,"ld c,e",
75,"ld c,h",76,"ld c,l",77,"ld
c,(hl)",78,"ld c,a",79,"ld d,b",
80,"ld d,c",81
9030 DATA "ld d,d",82,"ld d,e",8
3,"ld d,h",84,"ld d,l",85,"ld d,
(ch)",86,"ld d,a",87,"ld e,b",88,
"ld e,c",89,"ld e,d",90,"ld e,
e",91,"ld e,h",92,"ld e,l",93,"ld
e,(hl)",94,"ld e,a",95,"ld h,b",
96,"ld h,c",97,"ld h,d",98,"ld
h,e",99,"ld h,h",100,"ld h,l",101,
"ld h,(hl)",102,"ld h,a",103,"
ld l,b",104,"ld l,c",105,"ld l,d",
106,"ld l,e",107,"ld l,h",108,
"ld l,l",109,"ld l,(hl)",110,"ld
l,a",111,"ld l,(b)",112,"ld l,
(c)",113,"ld l,(d)",114,"ld l,
(e)",115,"ld l,(h)",116,"ld l,
(l)",117,"halt",118,"ld (hl),a",
119,"ld a,b",120,"ld a,c",121,"
ld a,d",122,"ld a,e",123,"ld a,h",
124,"ld a,l",125
9040 DATA "ld a,(hl)",126,"ld a,
a",127,"add a,b",128,"add a,c",1
29,"add a,d",130,"add a,e",131,"
add a,h",132,"add a,l",133,"add
a,(hl)",134,"add a,a",135,"add a,
b",136,"add a,c",137,"add a,d",
138,"add a,e",139,"add a,h",140,
"add a,l",141,"add a,(hl)",142,"
add a,a",143,"sub b,l",144,"sub c",
145,"sub d",146,"sub e",147,"su
b,h",148,"sub l",149,"sub (hl)",
150,"sub a",151,"abc a,b",152,"a
bc a,c",153,"abc a,d",154,"abc a,

```

```

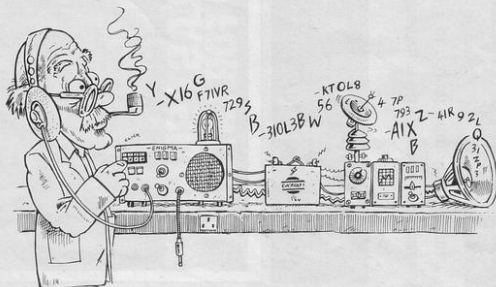
e",155,"abc a,h",156,"abc a,l",
157,"abc a,(hl)",158,"abc a,a",1
59,"and b",160,"and c",161,"and
d",162,"and e",163,"and h",164,
"and l",165,"and (hl)",166,"and a",
167,"xor b",168,"xor c",169
9050 DATA "xor d",170,"xor e",17
1,"xor h",172,"xor l",173,"xor (
hl)",174,"xor a",175,"or b",176,
"or c",177,"or d",178,"or e",179,
"or h",180,"or l",181,"or (hl)",
182,"or a",183,"cp b",184,"cp c",
185,"cp d",186,"cp e",187,"cp
h",188,"cp l",189,"cp (hl)",190,
"cp a",191,"ret nz",192,"pop bc",
193,"JP nz,NN",194,"JP NN",195,
"call nz,NN",196,"push bc",197,"
add a,N",198,"rst 0",199,"ret z",
200,"ret",201,"JP z,NN",202,"ca
ll z,NN",204,"call NN",205,"adc
a,N",206,"rst 8",207,"ret nc",20

```

```

B,"Pop de",209,"JP nc,NN",210,"o
ut (N),a",211,"call nc,NN",212,"
Push de",213
9060 DATA "sub N",214,"rst 16",2
15,"ret c",216,"xor",217,"JP c,N
N",218,"in a,(N)",219,"call c,NN
",220,"abc a,N",222,"rst 24",223,
"ret Po",224,"pop hl",225,"JP P
o,NN",226,"ex (sp)",hl",227,"call
Po,NN",228,"push hl",229,"and N
",230,"rst 32",231,"ret pe",232,
"JP (hl)",233,"JP pe,NN",234,"ex
de,hl",235,"call pe,NN",236,"xo
r N",238,"rst 40",239,"ret p",24
0,"Pop af",241,"JP P,NN",242,"di
",243,"call p,NN",244,"push af",
245,"or N",246,"rst 48",247,"ret
m",248,"ld sp,hl",249,"JP m,NN",
250,"ex",251,"call m,NN",252,"c
P N",254,"rst 56",255
9999 RETURN

```



```

1 FOR A=0 TO 7: READ B: POKE
USR "(9a)+B, NEXT A
2 FOR A=0 TO 7: READ B: POKE
USR "(9b)+B, NEXT A
3 FOR A=0 TO 7: READ B: POKE
USR "(9c)+A,B: NEXT A
4 LET sc=0: LET v=0
5 LET v=21: LET x=15: LET s=2
6: LET r=15
10 LET s=INT (RND*32): LET b=2
20 PRINT AT b,a: INK 2: (9a)
30 PRINT AT v,x: INK 4: (9b)
35 PRINT AT s+1-r-1: " PRI
NT AT s,r: (9c)
36 BEEP .01,s: LET S=-1
38 PRINT AT 0,6: "SCORE "sc
39 PRINT AT 0,21: "MISSILES "v
40 LET c=INKEY$
50 IF c="5" THEN LET r=r-1
62 IF c="6" THEN LET r=r+1
78 IF s=1 THEN GO TO 150
88 IF r=a AND s=b THEN GO TO
160
98 IF sc=20 THEN GO TO 1000
95 IF v=25 THEN GO TO 2000
110 GO TO 20
150 CLS: LET v=v+1: GO TO 5
160 PRINT AT 0,0: INK 1: FLASH
1,"BANG!"
163 FOR a=30 TO 39: BEEP .05,a:
NEXT a
170 LET sc=sc+1
180 GO TO 10
1000 CLS: PRINT "YOU MADE IT WI
TH "25-v" MISSILES LEFT"
1005 FOR j=1 TO 32: BEEP .05,j
1020 NEXT j
1030 GO TO 1005
2000 CLS
2001 PRINT "YOU HAVE JUST USED U
P ALL YOUR MISSILES BUT THERE A
RE STILL SOME INVADERS LEFT"
2010 BEEP .5,0: BEEP .5,-2: BEEP

```

MISSILE



```

.5,-4
2020 GO TO 2010
3000 DATA 28,62,42,62,127,99,65,
65
3010 DATA 24,24,24,60,60,126,255
,255
3020 DATA 24,60,126,24,24,126,12
6,24

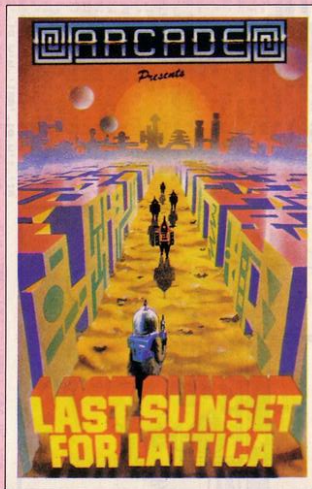
```

MISSILE for the 16K Spectrum was written by Tim Rose of Amisfield, Dumfries. Guide your missile with keys 5 and 8 towards the intruder. You have 25 missiles and 20 intruders to shoot.

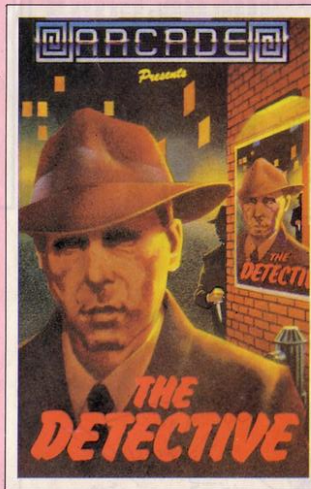
THE ARCADE COLLECTION



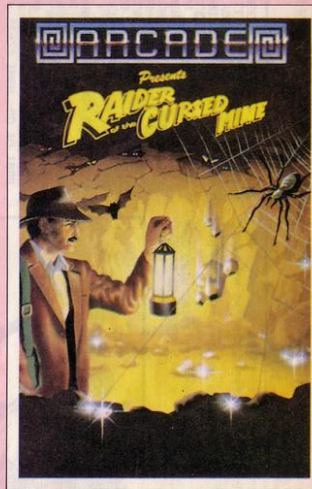
GRID RUN is a high resolution, fast machine code game using the spectrums sound and colour to the full. Set in a maze you must avoid oncoming android cars bent on your destruction. Bonus car every 10,000 points "Famous Five" hall of fame, increasing speed and difficulty. There is even a hold button to get your breath back. **PONTOON** included on side B absolutely free. Pontoon has full graphical representations of all the cards including King, Queen, Jack, "Intelligent" play of aces, and full analysis of results at end of each game. REF. GRID.



LAST SUNSET FOR LATTICA (Original) is a true graphical adventure game in real time. Your aim is to defuse a bomb hidden somewhere in a highly complicated maze avoiding many well armed androids along the way. Extra lives are there for the taking, so are the keys to take you to the next level and all the while time is running out for the little Planet of Lattica. REF. SUN.



THE DETECTIVE (Original) You thought it was just another "Take the secrets from a Safe and Run" job but the mob thought differently. They will try everything to stop you this time, if madmen, lasers, bombs, dynamite, daggers, barrels, blister bombs, crates, helicopters, jets and fourteen other levels do not get you, you might just make it. Opening the safe has its pitfalls too. Fast moving, mix game with excellent graphics and sound. A very addictive game. REF. DET.



RAIDER OF THE CURSED MINE (Original) Greed drove you down into the old diamond mine, sheer determination and luck is the only way out again. Lifts help you, so do lamps, and diamonds can't buy a fortune but beware of the evils that lurk deep in the mine. Trolls who throw boulders at you, spiders who eat you, ghosts who show no mercy and bats who steal things, add to this a time bonus and you have an exciting Arcade quality game. Reach level 32 and escape to the big outside world. REF. RAID.

All these games are available for the ZX Spectrum 48K for the incredible price of only **£5.50** including P&P VAT etc. Just complete the mail order form for prompt dispatch by return of post.

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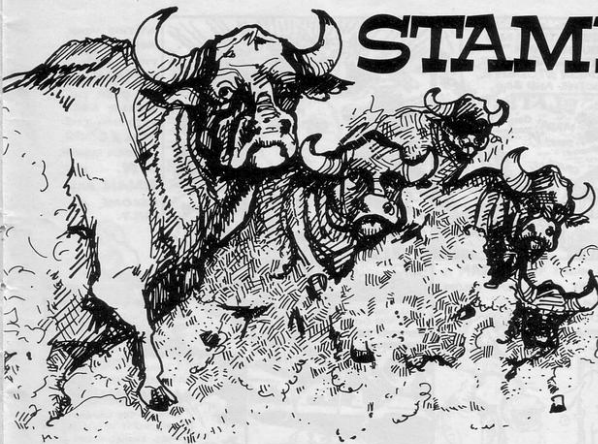
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*Please delete/complete as applicable

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Name: Mr/Ms/Miss

Address



STAMPEDE

IT IS the law of the jungle — kill or be killed — as you drive your truck over the scrub straight into a stampede of wild buffalo. If you are within range you can fire with “.” or you must dodge the wild beasts using “6” for down, “7” for up and “M” for over-

drive. If you hit five buffalo, you must stop to repair your vehicle; stop with “1”.

Stampede was written for the 1K ZX-81 by A Chetwode of Ramsbury, Wilts.

RELEASE your parachutist using key “0” to make a controlled landing on the landing pad. The numbers beneath the landing pad indi-

cate the points you score if you land accurately. **Sky Diver** was written by Jeremy Bell of Tuffley, Gloucester for the 16K ZX-81.

```

100 LET A$=""
110 LET F=0
120 LET C=0
130 LET D=INT (RND*27)+2
140 LET S=+1
150 PRINT AT 19,0;A$
160 SCROLL
170 PRINT AT A,F;"="
180 PRINT AT A,F;"="
190 LET F=F+1
200 IF F=27 THEN LET F=1
210 IF A=1 THEN LET A=2
220 IF A=2 THEN LET A=13
230 IF INKEY$="" THEN GOSUB 60
240
250 IF INKEY$="7" THEN LET A=A-
260 IF INKEY$="5" THEN LET A=A+
270 IF INKEY$="5" THEN LET F=F-
280 IF INKEY$="M" THEN LET F=F+
290 IF INKEY$="1" THEN GOTO 200
300
310 GOTO 130
320 PAUSE 1
330 PRINT "SCORE ",S
340 PAUSE 500
350 CLS
360 RUN
370 PRINT AT A,F+2;"-----"
380 PRINT AT A,F+2;"="
390 RETURN
  
```



SKY DIVER

```

1 REM "SKY DIVER"
5 LET HS=0
10 CLS
15 LET S=0
20 LET L=L0
30 LET A=INT (RND*21)+1
40 LET D=INT (RND*7)+2
41 LET G=D+1
42 LET K=0
44 PRINT AT 0,9;"**SKY DIVER**"
"AT 1,3;"SCORE=";S;AT 1,14;"HIG
HEST SCORE=";HS;AT 21,0;"JUMPS=";
JL
50 PRINT AT 19,A;"(3*2*2*1*5*
3*2*2)"
60 PRINT AT 20,A+1;"5";AT 20,A
+3;"10";AT 20,A+5;"5"
70 FOR C=0 TO 28
  
```

```

75 PRINT AT D,C;"(9*9*9*9*9)"
77 IF INKEY$="0" THEN LET K=1
80 IF K=1 THEN PRINT AT G,C+1;
"(9*9);AT G+1,C+1;"Y"
81 IF G=17 AND C+1>A AND C+1<
A+3 OR G=17 AND C+1>A+4 AND C+1<
A+8 THEN GOTO 300
82 IF G=17 AND C+1>A+3 OR G=17
AND C+1>A+4 THEN GOTO 350
85 IF G=18 THEN GOTO 400
131 PRINT AT G,C+1;" "AT G+1,C
+1;" "
132 IF K=1 THEN LET G=G+1
140 PRINT AT D,C;" "
141 IF C=28 THEN LET C=0
150 NEXT C
160 STOP
300 LET S=S+5
  
```

```

320 GOTO 400
350 LET S=S+10
400 CLS
401 IF S>HS THEN LET HS=S
410 LET L=L+1
420 IF L=0 THEN GOTO 500
430 GOTO 30
500 CLS
510 PRINT AT 10,3;"DO YOU WANT
ANOTHER GO?"AT 11,12;"Y/N"?
520
530 IF INKEY$="" THEN GOTO 10
540 IF INKEY$="N" THEN GOTO 550
550 CLS
560 PRINT AT 10,6;"HIGHEST SCOR
E=";HS
570 STOP
  
```



AUTOMATA

ONCE UPON A TIME (AND
A MISERABLE TIME 'TAS)
COMPUTER GAMES WERE
EXTREMELY VIOLENT,
DESTRUCTIVE AND BORING.

LATE ONE NIGHT THE PIMA
DISTURBED BY A VISITOR FROM
THE DISTANT GALAXY
OF MORRIS MINOR

THE CRITICS GO WILD!
ERIK ANDERSON IS HALL OF FAME

A cartoon illustration of a man in a suit and a woman in a dress. The man is holding a sign that says "TIME ASSIC!" and the woman is holding a sign that says "CORKS!".

WHAT DO YOU KEEP 

STOPPING FOR?

CAR PARK

BEEP! CAR SICKNESS!

LEMMIE QUITTA

HERE, YA BUM!

TELEPHONE BOOTH

NOW TO RETRIEVE MORRIS SO THAT I CAN SELL HIM TO SOME O MUG! GO, MY PHANTHREAXY BIKERS

I'M FREE! TAKEEE!

WATCH OUT FOR.....

CREEPY CARBON MONOXIDE

PRECIOUS PETROL

LOONY LIFT

ELEVATOR

GRRR!

AND CLINGING WHEEL CLAMPS THAT BRING HIM TO A GRINDING HALT...

AT THIS VERY
MOMENT,
THOUSANDS OF
PIMANIACS
ALL OVER THE
WORLD, ARE
SEEKING THE
REAL £6000
GOLDEN SUMM
OF PI. THE
PIMAN HAS
BECOME A

WELL, 'OW MUCH 'AVE 'OU GOT?

A POGO-STICK, SAXOPHONE AND A CAN OF WORTH.

WELL, THAT'S 'OW MUCH IT'

SIGN HERE HERE AN' HEF

EH, WOT?

TOO LATE! THE
MAD BIKERS
SLAZE IN, LIKE
GHOSTS THROUGH
THE BRICK WALL...

THIS IS IT!

MORRIS
meets the

MORRIS
meets the
Bikers

SO WHAT'S **AUTOMATA** GOT
THE WAY OF CLASSIC ENTERTAIN-
MENT? HOW ABOUT THE
DEFINITIVE VERSION OF THAT
BOARD
GAME!

AND HAS TO COLLECT TEN
GOLDEN COINS BEFORE
CAN ESCAPE THROUGH THE
EXIT TO THE NEXT SCREEN
THERE ARE 9 SCREENS
ALTOGETHER BEFORE HE IS

MAYBE WE DON'T LIKE THE NOISE HIS HORN MAKES, AN' MAYBE WE CAN'T GET HIM IN THE LIFTS - BUT WE CAN FLY THROUGH WALLS, AN WE DON'T CARE ABOUT NO HAND KISSING OR NOISE-

AND IF YOU CAN'T
FIND ANY
HUMANS TO
PLAY AGAINST,
WE DARE YOU
TO BEAT YOUR

***2 TO 5 PLAYERS**
***LARGE SIZE**
MOVING BOARD
DISPLAY ***SAVE**
***STATE OF PLAY**
BUTTON ***YOUR**
BANKER' **GO**

IT MAY WELL WIN!!

LOSE

10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

GAME FACILITY.
AT THE TOUCH OF A
COMPUTER AS 'HONEST
TO JAIL!

THE STORY SO FURTHER

HAVING LOST AT GO TO JAIL! TO THEIR COMPUTER, THE PIMAN & A PAL GO TO THE

FLICKS... WHEREIN AUTOMATA SPRING A SURPRISE.

OUT NOW

MY NAME IS **UNCLE GROUCHO**

YOU WIN A PAT CIGAR

GROUCHO! IT'S YOU!!

FIND THE HOLLYWOOD PERSONALITY IN THIS GAME, AND WIN A TRIP TO MEET 'EM FLY OUT BY CONCORDE, STAY AT A REAL LOUZY HOTEL AND HAVE £500 TO SPEND...

WHAT IS THIS, THE STAMPEDE SEASON? WE'RE BEING TAMPALD!

...THIS TRIP FOR 2 FINISHES WITH A FURBLY CRUISE HOME ON THE DEZ!

THEY MUST BE OFF TO GET THEIR 'UNCLE GROUCHO'S'

THE 'PIMANIA' FOLLOW-UP

I THINK THAT MUST BE THE LAST OF THEM NOW...

HOLLYWOOD, 5,000 MILES NE THE CROWN FLIES

RIO DE JANEIRO WELCOMES GAUCHOS

HOW MUCH MORE OF THIS CHAI YOU TAKE?!!

HAVING HIDDEN A WORLD-FAMOUS HOLLYWOOD STAR IN "GROUCHO", AUTOMATA WILL SEND 2 LUCKY PLAYERS TO MEET THEM! TRACK GROUCHO AS HE TOURS THE U.S.A. - CARTOONS, MUSIC & LARFS.

HEY, POND-LIFE, CAN'T YOU MAKE THIS THING GO FASTER?

I'D LIKE TO SEE YOU DO BETTER, BIG EAD! JUST COS YOU'VE NOW GOT TO BILLING IN THE INTRO PANEL...

CHAI

ALASKA

ARE YOU SURE THIS IS ARIZONA?

THAT MULE WAS SLOW TO THE LAST, IT'S BEEN SITTING IN MY STOMACH FOR 2 DAYS NOW

WE SHOULD NEVER HAVE TEASED THE PIMAN AND COMPASS FOR FUR COATS! WE'RE LOST AGAIN

FOR MILES

HOLLYWOOD, 5,000 MILES NE THE CROWN FLIES

RIO DE JANEIRO WELCOMES GAUCHOS

HOW MUCH MORE OF THIS CHAI YOU TAKE?!!

AFTER THE STATES THE BOYS LOOK EAST FOR ENTERTAINMENT

SOH, GROUCHO! I'M ARIKIK

ALREADY? WE HAVEN'T TAKEN OFF YET...

PRESENTING ORIENTAL GAME OF RUM & SIKER. PRAY IT GOOD!

YAK ZEE

TEND HARMONY, ALL GREAT!

THAT'S £69,000 YOU OWE ME

ROUIN

YAK ZEE

SPACE WITH IN IT

ON THE OFF-SITE PAGE, THE PIMAN WAS SOLD A CANTANERIOUS MORRIS, WHICH HE PROMPTLY ABANDONED IN A MULTI-STORY EYESORE - BUT GROUCHO HAD OTHER IDEAS.

WHY DID YOU DUMP IT? A CAR'S A CAR, AND WE NEED TONGOROS

I THOUGHT I WAS GOING TO GET THIS SPACE - COUSER - ANYWAY, YOU HAVEN'T MET THIS CREEPY ACTOR!

IS THAT IT?

BEARLIM

SO, YOU CAME BACK! WHO'S YER PAL WITH THE SHINY EYE BEGINS?

LISTEN, BUSTER - YOU'RE WORKING FOR US FROM NOW ON!

BEARLIM

ONLY PENDING

LEADER OF THE PAC TAKE THREE

ORDER FORM

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I ENCLOSE THE RIGHT MONEY, TOTAL £ or please charge my ACCESS/EURO/MASTERCARD

CARD NUMBER

MY SIGNATURE

MY NAME

MY ADDRESS

POST CODE

DID YOU KNOW THAT 'PIMANIA' AND 'GROUCHO' AND 'MORRIS MEETS THE BIKERS' ALL HAVE FREE ROCK RECORDS ON THEIR FRANK SIDES!!

WE'RE RODEOS TO LADY CLARE SINGLIVE & HER ROCK CAMP!

WHAT A VOICE

WHAT A NOSE

I'M SORRY I HURT YEW LEADER OF THE PAC...

BEARLIM

ONLY PENDING

LEADER OF THE PAC TAKE THREE

NOW THE PIMAN & HIS PALS HAVE RECORDED AN L.P. "THE PIMAN'S GREATEST HITS" ON MIND - BELOWING STEREO - CASSETTE.

BEARLIM

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LEADER OF THE PAC TAKE THREE

WE'VE PUT 8 CRYPTIC CLUES TO PIMANIA IN THE LYRICS FOLKS! KEEP SMILING...

ORDER FORM

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I ENCLOSE THE RIGHT MONEY, TOTAL £ or please charge my ACCESS/EURO/MASTERCARD

CARD NUMBER

MY SIGNATURE

MY NAME

MY ADDRESS

POST CODE

CHOPPER SQUAD

A S A helicopter pilot you must destroy all the enemy bases. A variety of points can be gained for the different types of buildings and

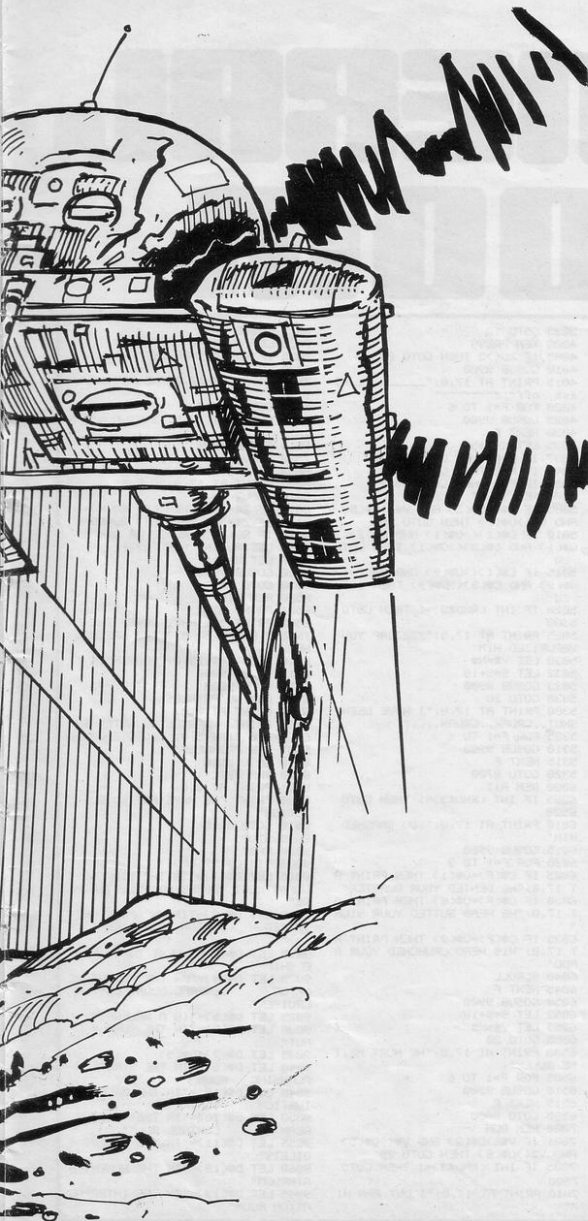
firing needs expert timing. **Chopper Squad** was written for the 16K Spectrum by R Davidson and P Watts of Seamills, Bristol.



```

1 LET HS=0:CLS:GO SUB 301:
GO SUB 1000
2 LET SC=0:LET SHOT=14:LET
Z=RND/100:LET X=RND*50
3 INK 4: BORDER 1:CLS:FOR
N=0 TO 20: BEEP Z,X:PRINT AT N,
31:"(isp)":NEXT N
4 FOR N=0 TO 20: BEEP Z,X:PR
INT AT N,0:"(isp)":NEXT N:FOR
N=0 TO 31: BEEP Z,X:PRINT AT 20
,N,"(isp)":NEXT N:FOR N=0 TO 3
1: BEEP Z,X:PRINT AT 0,N,"(isp)"
:NEXT N
5 INK 0:PRINT AT 19,1:INK 1
:FLASH 1:"a":PRINT AT 19,3:"a"
:PRINT AT 19,4:"e":PRINT AT 19
,7:"a":PRINT AT 19,9:"a":PRINT
AT 19,10:"a":PRINT AT 19,11:"a"
6 PRINT AT 19,13:"e":PRINT A
T 19,14:"e":PRINT AT 19,16:"a"
:PRINT AT 19,19:"a":PRINT AT 19
,20:"a":PRINT AT 19,24:"a"
7 INK 1:PRINT AT 2,2:"999999
999
99 9 99"
8 PRINT AT 3,3:"99 9 9 9 9
99 9 9"
9 FOR N=0 TO 5: INK 2: CIRCLE
240,160,N:NEXT N:INK 0
10 LET A=4:LET B=1
20 PRINT AT 21,17:"SHOTS LEFT=
":SHOT:PRINT AT 21,0:"SCORE="
:SC:PRINT AT A,B:"cd":BEEP .0
83,40
21 IF SC=0 THEN PRINT AT 21,0
:"":PRINT AT 21,0:"SCORE="
:SC
22 IF SC>1000 THEN GO TO 600
0
23 IF SC=-50 THEN PRINT AT 21
,10:""
24 IF SHOT=9 THEN PRINT AT 21
,30:""
25 IF SC=50 THEN PRINT AT 21,
10:""
30 LET B=B+1
40 FOR Z=0 TO 5: IF B=25 THEN
LET B=1:LET A=4:PRINT AT 4,25
:""
50 IF INKEY$="D" OR INKEY$="d"
THEN LET SHOT=SHOT-1:PRINT AT
A,B:"":GO TO 99
60 GO TO 20
99 IF SHOT=0 THEN PRINT INVE
RSE 1:FLASH 1:AT 11,10:"GAME OV
ER":FOR N=0 TO 500:NEXT N:GO
TO 6000
100 PRINT AT A,B:"":LET A=A+1
: BEEP .05,A+5
101 PRINT AT A,B:"e":FOR Z=0 T
O 5:NEXT Z
104 IF A=19 AND B=1 THEN PRINT
AT A,B:FLASH 1:INK 2:"b":LET
SC=SC+200:GO TO 10
105 IF A=19 AND B=3 THEN PRINT
AT A,B:FLASH 1:INK 2:"b":LET
SC=SC+50:GO TO 10
106 IF A=19 AND B=4 THEN PRINT
AT A,B:FLASH 1:INK 2:"b":LET
SC=SC+100:GO TO 10
107 IF A=19 AND B=7 THEN PRINT
AT A,B:FLASH 1:INK 2:"b":LET
SC=SC+50:GO TO 10
108 IF A=19 AND B=9 THEN PRINT
AT A,B:FLASH 1:INK 2:"b":LET
SC=SC+50:GO TO 10
109 IF A=19 AND B=10 THEN PRIN
T AT A,B:FLASH 1:INK 2:"b":LE
T SC=SC+50:GO TO 10
110 IF A=19 AND B=11 THEN PRIN
T AT A,B:FLASH 1:INK 2:"b":LE
T SC=SC+50:GO TO 10
111 IF A=19 AND B=13 THEN PRIN
T AT A,B:FLASH 1:INK 2:"b":LE
T SC=SC+100:GO TO 10
112 IF A=19 AND B=14 THEN PRIN
T AT A,B:FLASH 1:INK 2:"b":LE
T SC=SC+100:GO TO 10
113 IF A=19 AND B=16 THEN PRIN
T AT A,B:FLASH 1:INK 2:"b":LE
T SC=SC+50:GO TO 10
114 IF A=19 AND B=19 THEN PRIN
T AT A,B:FLASH 1:INK 2:"b":LE
T SC=SC+50:GO TO 10
115 IF A=19 AND B=20 THEN PRIN
T AT A,B:FLASH 1:INK 2:"b":LE
T SC=SC+50:GO TO 10
116 IF A=19 AND B=24 THEN PRIN
T AT A,B:FLASH 1:INK 2:"b":LE
T SC=SC+100:GO TO 10
119 IF A=18 THEN PRINT INK 3:
FLASH 1:AT A,B:"e":BEEP .1,2:
BEEP .1,1: BEEP .2,1: BEEP .05
,1:PRUSE 10:PRINT AT A,B:""
:LET SC=SC-200:GO TO 10
300 GO TO 100
301 POKE USR "a",BIN 00011010
302 POKE USR "a",BIN 00111110
303 POKE USR "a",BIN 01111111
304 POKE USR "a",BIN 01111110
305 POKE USR "a",BIN 10010001
306 POKE USR "a",BIN 11111111
307 POKE USR "a",BIN 11111111
308 POKE USR "a",BIN 11001111
309 POKE USR "a",BIN 11001111
310 POKE USR "b",BIN 00101010

```

```

311 POKE USR "b"+1,BIN 10011000
312 POKE USR "b"+2,BIN 10011010
313 POKE USR "b"+3,BIN 00100010
314 POKE USR "b"+4,BIN 01010101
315 POKE USR "b"+5,BIN 11101000
316 POKE USR "b"+6,BIN 11000110
317 POKE USR "b"+7,BIN 10100101
318 POKE USR "c",BIN 10001001
319 POKE USR "c"+1,BIN 01010000
320 POKE USR "c"+2,BIN 00111111
321 POKE USR "c"+3,BIN 01010011
322 POKE USR "c"+4,BIN 10001000
323 POKE USR "c"+5,BIN 00000000
324 POKE USR "c"+6,BIN 00000000
325 POKE USR "c"+7,BIN 00000000
326 POKE USR "d",BIN 11111111
327 POKE USR "d"+1,BIN 00010000
328 POKE USR "d"+2,BIN 11111100
329 POKE USR "d"+3,BIN 11111110
330 POKE USR "d"+4,BIN 11111110
331 POKE USR "d"+5,BIN 00111100
332 POKE USR "d"+6,BIN 00010001
333 POKE USR "d"+7,BIN 11111110
334 POKE USR "e",BIN 00000000
335 POKE USR "e"+1,BIN 00011000
336 POKE USR "e"+2,BIN 00111100
337 POKE USR "e"+3,BIN 00011000
338 POKE USR "e"+4,BIN 00011000
339 POKE USR "e"+5,BIN 00100100
340 POKE USR "e"+6,BIN 00111100
341 POKE USR "e"+7,BIN 00011000
342 POKE USR "f",BIN 11111111
343 POKE USR "f"+1,BIN 10011001
344 POKE USR "f"+2,BIN 11111111
345 POKE USR "f"+3,BIN 10011001
346 POKE USR "f"+4,BIN 11111111
347 POKE USR "f"+5,BIN 10011001
348 POKE USR "f"+6,BIN 11100111
349 POKE USR "f"+7,BIN 11100111
350 POKE USR "g",BIN 00111000
351 POKE USR "g"+1,BIN 00111100
352 POKE USR "g"+2,BIN 01000001
353 POKE USR "g"+3,BIN 10000001
354 POKE USR "g"+4,BIN 01000011
355 POKE USR "g"+5,BIN 01000001
356 POKE USR "g"+6,BIN 00100100
357 POKE USR "g"+7,BIN 00000000
900 RETURN
1000 LET A$="***** 1983
*****
NTROL" YOU ARE IN CONTRO
L OF A HELICOPTER IN W41
CH YOU MUST DESTROY ALL THE E
NEMY BASES .....
..... POINTS RATIO---
a=50 f=100 (flash
ing a=200) YOUR CHOPPER cd
the d key) MUST BOMB e (with
ALL THE BASES a f
TO MAKE THEM EXPL
GOOD LUCK!!!
ODE b
1001 LET G=0: LET P=0: LET G=LEN
A$
1002 FOR N=1 TO G
1003 IF P<32 THEN GO TO 1005
1004 LET G=G+1: LET P=0
1005 PRINT AT G,P: INK 1: " cd"
1006 BEEP RND/50: RND/50
1007 PRINT AT G,P:A$(N): LET P=P
+1
1008 NEXT N
5000 RETURN
6000 CLS: IF SCXHS THEN PRINT
"HELL DONE! YOU HAVE TODAY'S
HIGH SCORE"
6001 PRINT AT G,0:"DO YOU WANT T
O PLAY AGAIN Y/N?"
6002 INPUT A$
6003 IF A$="Y" OR A$="y" THEN C
LS: GO TO 2
6006 STOP

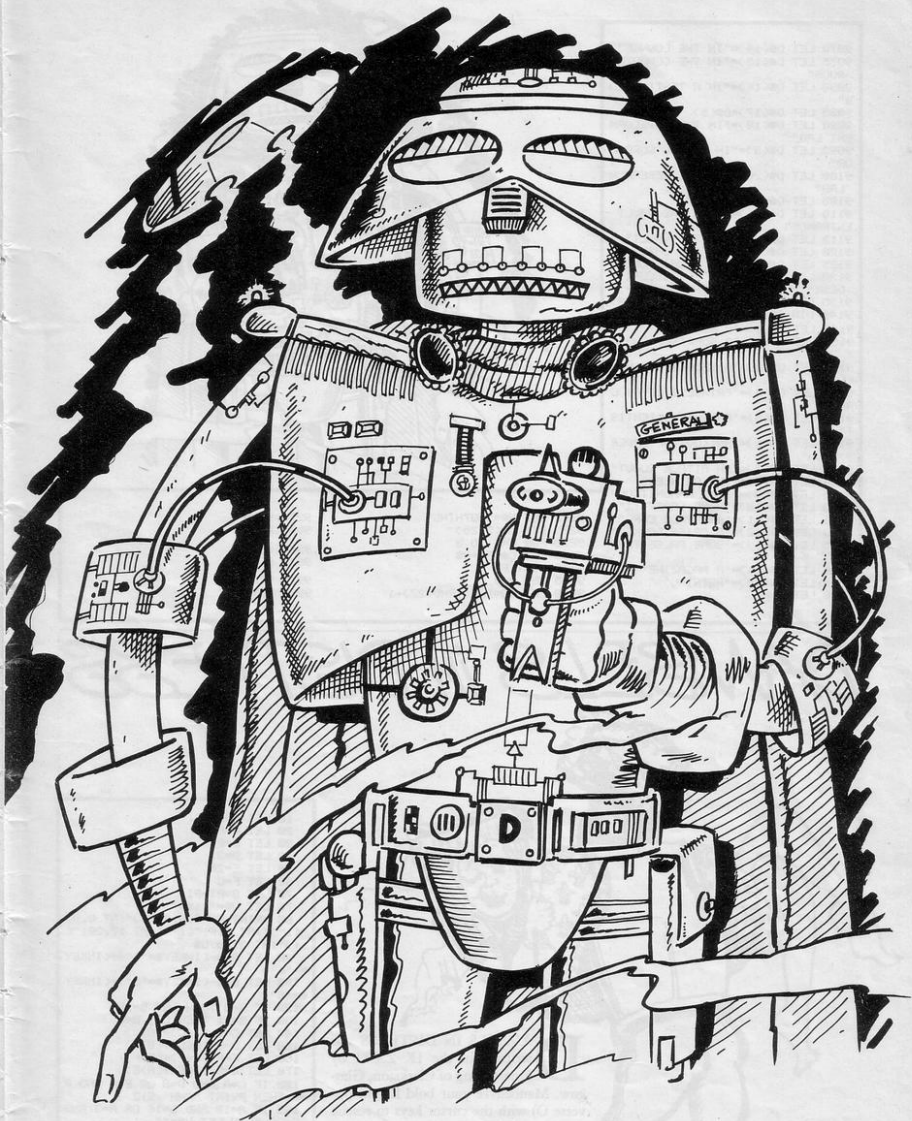
```


GENERAL

```

5 GOSUB 9900
10 LET S=0:R=0
15 LET V=0:INT(RND*15)+1
17 IF V=0:GOTO 15 AND P=1 THEN GOTO 15
20 PRINT AT 17,0;"I CAN SEE ";
V=
25 GOSUB 9900
30 PRINT AT 17,0;"I AM ";S
35 GOSUB 9900
40 PRINT AT 17,0;"I AM CARRYIN
G:--
45 FOR F=1 TO 3
50 PRINT C(F)
55 NEXT F
60 GOSUB 9900
65 GOSUB 9900
70 PRINT AT 17,0;"WHAT NOW"
75 INPUT R#
78 GOSUB 9900
80 IF R#="T" THEN GOTO 1000
85 IF R#="D" THEN GOTO 2000
90 IF R#="Q" THEN GOTO 3000
95 IF R#="P" THEN GOTO 4000
100 IF R#="S" THEN GOTO 5000
105 IF R#="H" THEN GOTO 6000
110 IF R#="R" THEN GOTO 7000
115 IF R#="M" THEN GOTO 8000
120 GOTO 70
1000 REM TAKE
1005 IF V=0:GOTO 2 OR V=0:GOTO 5 OR
V=0:GOTO 7 OR V=0:GOTO 10 THEN GOTO 20
1010 IF C(1,1 TO 7)<N$ AND C(2,1 TO 7)<N$
N$ THEN GOTO 20
1015 IF C(1,1 TO 7)=N$ THEN GOTO
0 1030
1020 IF C(2,1 TO 7)=N$ THEN GOTO
0 1040
1025 IF C(3,1 TO 7)=N$ THEN GOTO
0 1050
1030 LET C(1,1)=V#
1035 GOTO 1070
1040 LET C(2,1)=V#
1045 GOTO 1070
1050 LET C(3,1)=V#
1070 PRINT AT 17,0;"O.K."
1072 IF V=0:GOTO 3 THEN LET S=S+5
1073 IF V=0:GOTO 8 THEN LET S=S+50
1074 IF V=0:GOTO 8 THEN LET P=1
1075 GOSUB 9900
1077 LET V=V#
1080 GOTO 20
2000 REM DRUP
2005 PRINT AT 17,0;"DROP WHAT(1,
2,3)"
2010 INPUT DR
2015 IF DR(1 OR DR(3) THEN GOTO 2
010
2017 IF C(DR)=0:GOTO 3 THEN LET S=
S-5
2020 LET C(DR)=N#
2025 GOSUB 9900
2030 GOTO 20
3000 REM GUIT
3005 FAST
3010 CLS
3015 SLOW
3020 STOP
3025 GOTO 10
4000 REM PRESS
4005 IF R(1)2 THEN GOTO 20
4010 GOSUB 9900
4015 PRINT AT 17,0;"-----b1
test off-----"
4020 FOR F=1 TO 6
4025 GOSUB 9900
4030 NEXT F
4035 LET S=S+50
4037 IF P=0 THEN LET S=S-30
4040 IF P=0 THEN GOTO 8700
4050 IF P=1 THEN GOTO 8500
5000 REM SHOOT
5005 IF V<0:GOTO 2 AND V<0:GOTO 5
AND V<0:GOTO 7 THEN GOTO 20
5010 IF C(1)<0:GOTO 1 AND C(2)<0
0:GOTO 1 AND C(3)<0:GOTO 1 THEN GOTO
20
5015 IF C(1)<0:GOTO 9 AND C(2)<0
0:GOTO 9 AND C(3)<0:GOTO 9 THEN GOTO
20
5020 IF INT(RND*3)=1 THEN GOTO
5300
5025 PRINT AT 17,0;"22222AP YOU
VAPORIZED HIM"
5030 LET V=V#
5032 LET S=S+10
5033 GOSUB 9900
5035 GOTO 20
5300 PRINT AT 17,0;"I HAVE BEEN
SHOOT..CRAAK..GROAN...."
5305 FOR F=1 TO 6
5310 GOSUB 9900
5315 NEXT F
5320 GOTO 8700
6000 REM HIT
6005 IF INT(RND*3)=1 THEN GOTO
6500
6010 PRINT AT 17,0;"YOU SMASHED
HIM"
6015 GOSUB 9900
6020 FOR F=1 TO 3
6025 IF C(F)=0:GOTO 1 THEN PRINT A
T 17,0;"HE DENTED YOUR BLASTER"
6030 IF C(F)=0:GOTO 6 THEN PRINT A
T 17,0;"HE HEAD BUTTED YOUR SIGN"
6035 IF C(F)=0:GOTO 9 THEN PRINT A
T 17,0;"HIS HEAD CRUNCHED YOUR A
MMO"
6040 SCROLL
6045 NEXT F
6050 GOSUB 9900
6052 LET S=S+10
6053 LET V=V#
6055 GOTO 20
6500 PRINT AT 17,0;"HE HURT ME,T
HE BULLY"
6505 FOR F=1 TO 6
6510 GOSUB 9900
6515 NEXT F
6520 GOTO 8900
7000 REM RUN
7001 IF V<0:GOTO 2 AND V<0:GOTO 5
AND V<0:GOTO 8 THEN GOTO 20
7005 IF INT(RND*3)=1 THEN GOTO
7500
7010 PRINT AT 17,0;"I OUT RAN HI
M"
7015 GOSUB 9900
7020 LET R=0:R+2
7025 IF R(1)27 THEN LET R=1
7030 GOTO 10
7500 PRINT AT 17,0;"HE HAS CAUGH
T ME"
7505 GOSUB 9900
7510 PRINT AT 17,0;"I WILL HIT H
IM"
7515 GOSUB 9900
7520 GOTO 6000
8000 REM MOVE
8005 PRINT AT 17,0;"F/B/S"
8010 INPUT Z#
8015 IF Z#="F" THEN LET R=R+1
8020 IF Z#="B" THEN LET R=R-1
8025 IF R(1) OR R(1)27 OR Z#="S"
THEN LET R=INT(RND*27)+1
8027 LET S=S+1
8028 GOSUB 9900
8030 GOTO 10
8500 REM WIN
8501 PRINT AT 0,0;
8505 PRINT "WE HAVE SAVED THE PR
INCESS AND "AT 5,0;"WE ARE NOW
HEROS"
8510 PRINT AT 15,0;"SCORE=";S
8515 PRUSE 9000
8520 GOTO 3000
8700 REM NO PRINCESS
8701 PRINT AT 0,0;
8705 PRINT "WE WILL BE HATED BY
EVERYONE "AT 5,0;"BECAUSE WE FU
ROGT THE PRINCESS"
8710 GOTO 8510
8900 REM FAIL
8901 PRINT AT 0,0;
8905 PRINT "WE HAVE FAILED OUR M
ISSION"
8910 GOTO 8510
8999 STOP
9000 FAST
9002 DIM D(27,60)
9005 LET D(1)=0;"IN THE STORAGE C
U (APARTMENT THERE'S AN ELEVATOR HE
RE"
9010 LET D(2)=0;"IN MY SPACE SHIP
,A RED BUTTON SAYS<<ELAST OF
F>>"
9015 LET D(3)=0;"NEXT TO MY SPAC
E SHIP"
9020 LET D(4)=0;"ON THE FLIGHT DE
CK OF GENERAL DOOMS BATTLE
CRUISER"
9025 LET D(5)=0;"IN A HALLWAY"
9030 LET D(6)=0;"IN THE SUPPLY DE
POT"
9035 LET D(7)=0:GOTO 5
9040 LET D(8)=0;"IN THE STRATEGY
PLANNING ROOM"
9045 LET D(9)=0;"IN THE DECONTAM
INATION CENTRE"
9050 LET D(10)=0;"IN THE TRACTOR
BERM CONTROL ROOM"
9055 LET D(11)=0;"IN THE WOMENS T
OILETS"
9060 LET D(12)=0;"IN THE WOMENS B
ATHROOM"
9065 LET D(13)=0;"IN THE INTERROG
ATION ROOM"

```

WICKED GENERAL DOOM has captured Princess Leya.

Your mission is to find her and take her to safety in your spaceship. Commands to use are T(take), D(drop),

Q(quit), P(press), S(shoot), H(hit), R(run), M(move). Once you have entered M you will be asked F/B/S? (forward, backward, sideways).

You can shoot only when you have a

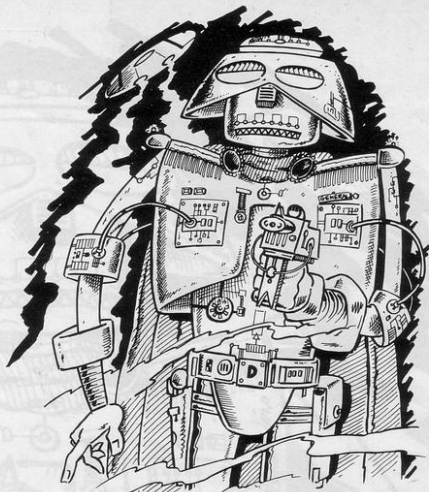
blaster and some ammunition. You can carry only three things at a time, including the princess.

Written for the 16K ZX-81 by Jonathan Huffer of Walsall, West Midlands.


```

9070 LET D$(14)="IN THE LOUNGE"
9075 LET D$(15)="IN THE COMPUTER
ROOM"
9080 LET D$(16)="IN A TESTING LA
B"
9085 LET D$(17)=D$(5)
9090 LET D$(18)="IN THE DEVELOP
MENT LAB"
9095 LET D$(19)="IN A LONG CORRID
OR"
9100 LET D$(20)="IN THE RESEARCH
LAB"
9105 LET D$(21)="LOST"
9110 LET D$(22)="NEAR THE VAULT
ENTRANCE"
9115 LET D$(23)="IN THE VAULT"
9120 LET D$(24)="IN THE JAIL"
9125 LET D$(25)="IN A JAIL CELL"
9130 LET D$(26)="AT THE SECURITY
DESK"
9135 LET D$(27)="IN AN ELEVATOR"
9140 DIM U$(15,25)
9145 LET U$(1)="A BLASTER"
9150 LET U$(2)="A SURPRISED GUARD"
9155 LET U$(3)="A SHINESTONE NECK
LACE"
9160 LET U$(4)="PRINCESS LEYAS CA
PE"
9165 LET U$(5)="AN EVIL SCIENTIST"
9170 LET U$(6)="AN OUT OF ORDER
SIGN"
9175 LET U$(7)="AN ATTACK ROBOT"
9180 LET U$(8)="THE PRINCESS"
9185 LET U$(9)="SOME AMMUNITION"
9190 LET U$(10)="SOME GRAFFITI"
9195 LET U$(11)="AN APPLE CORE"
9200 LET U$(12)="A CRISP PACKET"
9205 LET U$(13)="SOME FALSE TEET
H"
9210 LET U$(14)="A MAGAZINE"
9215 LET U$(15)="NOTHING"
9220 LET S=0

```



```

9222 LET N$="NOTHING"
9225 DIM C$(3,25)
9230 FOR F=1 TO 3
9235 LET C$(F)=N$
9240 NEXT F
9245 LET P=0
9250 LET RO=INT (RND*(27)+1)

```

```

9255 SLOW
9500 RETURN
9900 SCROLL
9910 SCROLL
9915 SCROLL
9999 RETURN

```

DAMSELS IN DISTRESS



DAMSELS IN DISTRESS was written for the 1K ZX-81 by Stuart Lang of Clarkston, Glasgow. Manoeuvre your bold knight (inverse O) with the cursor keys to rescue the damsel (inverse asterisk) and take her to the castle (inverse +). To make it easier you can run off one side of the screen and you will re-appear on the other. You must avoid the dragons (inverse ") which guard her.

```

10 LET A=PI/PI
20 LET B=A
30 LET C=B
40 LET D=31
50 LET E=20
60 LET F=C
70 LET G=PI-PI
75 LET U$="(1*)"
80 PRINT AT A,B;"(10)" AT C,D;"(1)"
90 LET A=F*(1)" AT E,F;"(1)" AT 17,28;"(1)"
95 LET A=F*(1)" AT 3,28;U$
100 LET A=F*(1)" AT 3,28;U$
105 LET B=B-(INKEY$="5")*(INKEY$="9")
120 IF B=0 THEN LET B=30
130 IF B=31 THEN LET B=0
140 LET C=C-(A<C)*(A>C)
150 LET D=D-(B<D)*(B>D)
160 LET F=F-(B<F)*(B>F)
170 LET E=E-(A<E)*(A>E)
180 IF C=A AND D=B OR E=A AND F=B THEN PRINT "RAH";S;2
185 IF A=10 AND B=16 OR A=3 AND B=28 THEN LET U$=" "
190 IF A=17 AND B=28 AND U$=" " THEN GOTU 350
200 CLS
300 GOTU 80
350 LET S=S+1
360 GOTU 75

```


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LEAVE-ONE

LEAVE-ONE is a form of Solitaire. The object is to clear the board of all the white pieces to leave only one in the central position.

Leave-one was written by John Aries, aged 14, of Dunstable, Bedfordshire for the 16K Spectrum.

```

10 FOR f=USR "a" TO USR "h"+7:
READ a: POKE f,a: NEXT f
15 GO SUB 1000
20 DATA 255,120,120,120,120,12
8,120,120
21 DATA 255,1,1,1,1,1,1,1
22 DATA 120,120,120,120,120,12
8,120,255
23 DATA 1,1,1,1,1,1,1,255
24 DATA 255,120,135,149,159,19
1,191,191,255,1,225,241,249,253,
253,253,191,191,191,159,143,135,
120,255,253,253,253,249,241,225,
1,255
30 DATA 1,1,1,1,1,1,1,1,1,1,1,
1,1,1,1,1,1,1,0,0,0,0,1,1,1,1,0,
0,0,0,1,1,1,1,0,0,0,0,1,1,1,1,0,
0,0,0,1,1,1,1,1,1,1,1,1,1,1,1,
1,1,1,1,1,1
40 BORDER 0: PAPER 0: INK 7: B
RIGHT 1: CLS
50 PLOT 175,87: DRAW 57,0: DRA
W 0,9: DRAW -57,0: DRAW 0,-9
60 PRINT AT 10,22: PAPER 3:
"
70 LET f1=0: LET replay=0: LET
rc=1
80 DIM p(47): DIM q(47): DIM r
(47): DIM s(47)
100 DIM x(64): DIM y(64): DIM o
(64)
110 RESTORE 30: LET a=1: LET b=
3: FOR f=1 TO 64: READ o(f)
120 IF a=17 THEN LET a=1: LET
b=b+2
130 LET x(f)=b: LET y(f)=a
140 LET a=a+2
150 IF o(f)=0 THEN PRINT AT x(
f),y(f):"(a:ab):"AT x(f)+1,y(f)
: "(c:c:gd)"
160 IF o(f)=1 THEN PRINT AT x(
f),y(f):"(c:gf):"AT x(f)+1,y(f)
: "(c:gf:gh)"
170 IF x(f)=3 THEN PRINT AT 2,
y(f): PAPER 1: INK 4:y(f)/2+.5:
"

```

```

180 IF y(f)=11 THEN PRINT AT x
(f),0: PAPER 1: INK 4:x(f)/2-.5:
AT x(f)+1,0:
185 BEEP .01,b+a
190 NEXT f
195 IF replay=1 THEN PRINT AT
0,0:"NOW FOR AN ACTION REPLAY
": BEEP .6,0: BEEP .6,7: BE
EP .6,12
200 LET count=0
205 IF replay=1 THEN PRINT AT
10,22: FLASH 1:">REPLAY": GO TO
255
210 FOR f=1 TO 4
211 LET a$=INKEY$: LET i=CODE a
$-48
212 IF i=33 OR i=65 THEN GO TO
410
213 PRINT AT 10,20+f*2: FLASH 1
: "": IF i>0 OR i<1 THEN GO TO
211
214 IF f=1 THEN LET d=1
215 IF f=2 THEN LET c=1
216 IF f=3 THEN LET d1=1
217 IF f=4 THEN LET c1=1
218 PRINT PAPER 3:AT 10,20+(f*
2)/ INK 0: "": IF f=2 THEN PRINT
PAPER 3: INK 7: " "
219 BEEP .2,16: NEXT f
220 IF c<c1 THEN IF c+2<c1 TH
EN GO TO 200
230 IF c<c1 THEN IF c1+2<c TH
EN GO TO 200
240 IF d<d1 THEN IF d+2<d1 TH
EN GO TO 200
250 IF d<d1 THEN IF d1+2<d TH
EN GO TO 200
254 IF replay=0 THEN GO TO 256
255 FOR v=1 TO rc-1: LET dmp(v)
: LET cmp(v): LET d1=(v): LET c
1=(v)
260 LET f=(c-1)*9+d
262 LET g=(c1-1)*9+d1
263 LET e=c1: LET t=d1
266 IF c1<c THEN LET e=c1-1
267 IF c1<c THEN LET e=c-1

```

```

268 IF d1<d THEN LET t=d-1
269 IF d1>d THEN LET t=d+1
270 LET i=(e-1)*9+t
275 IF o(f)=1 AND o(g)=0 AND o(
l)=1 THEN GO TO 300
280 BEEP .2,-12: PRINT AT 10,22
: PAPER 3: "": GO TO 210
300 REM move Peice
310 IF replay=0 THEN LET p(rc)
=0: LET q(rc)=c: LET r(rc)=d1: L
ET s(rc)=c1: LET rc=rc+1
360 PRINT AT x(f),y(f):"(a:ab)
":AT x(f)+1,y(f):"(c:gf:gh)": BEEP
.2,36: PRINT AT x(g),y(g):"(a:
gf):AT x(g)+1,y(g):"(c:gf:gh)":
370 PRINT AT x(l),y(l):"(a:ab)
":AT x(l)+1,y(l):"(c:gf:gh)"
380 LET count=count+1: IF repla
y=0 THEN PRINT AT 10,22: PAPER
3:
385 IF count=47 AND f1=0 THEN
GO TO 409
390 LET o(l)=0: LET o(f)=0
400 LET o(g)=1
405 IF replay=0 THEN GO TO 210
406 IF replay=1 THEN NEXT v: F
OR f=0 TO 7: BEEP .1,f: BEEP .01
:f: BEEP .05,f+f: BEEP .1,f+f: B
EEP .01,f+f: BEEP .05,f+f+f: NEX
T f: GO TO 430
408 GO TO 410
409 GO SUB 600
410 PRINT AT 21,0:"YOU MADE "c
count: MOVE": LET f1=1: IF coun
t<1 THEN PRINT "s"
411 BEEP .1,36
420 LET replay=1: GO TO 90
430 PRINT 0:"PRESS ANY KEY TO
PLAY AGAIN "
440 IF INKEY$="" THEN GO TO 4
0
450 BEEP .1,36: PAUSE 10: GO TO
440
600 LET a$="**CONGRATULATIONS Y
OU FINISHED**"

```




```

610 FOR f=0 TO 32
620 PRINT AT 0,0;:GOTO 32)
630 LET a$=1$*2 TO 1$*1)
640 BEEP .01;CODE a$(f+32)/3
650 NEXT f
660 BEEP .5,36: RETURN
1000 BURDER 2: PAPER 1: BRIGHT 1
INK 6: CLS
1010 PRINT "-----LEAVE-ONE
-----"
1020 PRINT TAB 10; INK 4;"(11#10
3)"
1030 PRINT : PRINT TAB 2;" Leav
e-one is a version of Solita
ire. The object of the Game 1
s to jump over Pieces Game 1
ntally, vertically or horizon
ally, until only one Piece
remains."
1040 PRINT : PRINT " DON'T CHEA
T...the SPECTRUM will recor
nise any illegal move and
ignore you."
1050 PRINT : PRINT " To make a
move you type the number of
the column then the number
of the row. You do this tw
ice once for the Piece you
wish to move and then to th
e place you wish to jump it
to."
1060 PRINT E0; PAPER 1;"PRESS AN
Y KEY
1070 IF INKEY#<>" THEN GO TO 1
090
1080 BEEP .1,0: PAUSE 100: GO TO
1070
1090 FOR f=1 TO 3: BEEP .1,0: BE
EP .1,19: BEEP .1,24: BEEP .1,7
NEXT f: BEEP .1,0
1100 DIM z$(640): PRINT AT 2,0;
PAPER 1,2$; PRINT AT 6,0;" If y
ou find yourself in the Posi
tion that you cannot JUMP
another Piece you must Pres
s ~9~. This will abort the
Game and you will see an a
ction replay of your move
s. If you succeed the SPECTRUM
will know and you will be
congratulated."
1130 IF INKEY#="" THEN GO TO 11
30
1140 FOR f=1 TO 3: BEEP .24,0: B
EEP .1,19: BEEP .1,12: BEEP .1,1
9: NEXT f: BEEP .1,24
1150 RETURN
9999 SAVE "LEAVE-ONE" LINE 10

```


FOOTBALL POOLS PROGRAM

- The program lists out, in order of preference, the sixteen most likely score-draws: also the sixteen most likely homes, draws and aways.
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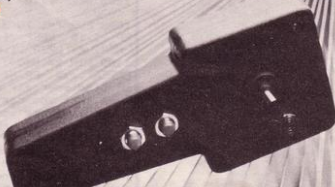
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SP1

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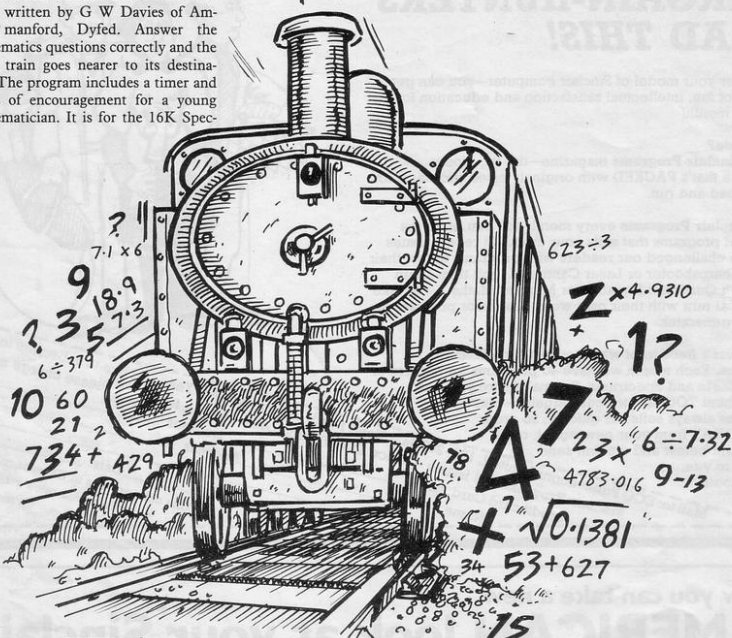


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ARITHMETIC EXPRESS was written by G W Davies of Ammanford, Dyfed. Answer the mathematics questions correctly and the steam train goes nearer to its destination. The program includes a timer and words of encouragement for a young mathematician. It is for the 16K Spectrum.



ARITHMETIC EXPRESS

```

1 GU SUB 365
2 PRINT AT 0,0;"PLEASE TYPE Y
OUR NAME AND PRESS ENTER"
4 INPUT N$
5 CLS
6 PRINT TAB 2;"HELLO, ";N$
10 LET Y=10
20 LET X=0
30 PRINT AT 3,0;"SKILL 1/2 OR
3?"
40 INPUT A$
50 LET A=INT (RND*10)
60 LET B=INT (RND*10)
70 LET C=INT (RND*10)
80 LET D=INT (RND*10)
85 LET E=INT (RND*10)
87 LET F=INT (RND*10)
90 CLS
100 PRINT AT Y,X;"(197/94: 195
)"
110 PRINT AT Y+1,X;"(195/3K:1SP)
"
120 PRINT AT Y+2,X;"(197/94:1SP
)"
130 PRINT AT 13,0;"-----
"
140 PRINT AT 0,0;"GET TO THE EN
D"
150 IF A$="1" THEN PRINT AT 5,
0;A;"+";B
160 IF A$="2" THEN PRINT AT 5,
0;C;"+";D
165 IF A$="3" THEN PRINT AT 5,
0;E;"+";F
170 LET H=A+B

```

```

180 LET K=C*D
185 LET M=E-F
190 INPUT Z
200 IF A$="1" AND Z=H THEN GU
TO 250
210 IF A$="2" AND Z=K THEN GU
TO 250
215 IF A$="3" AND Z=M THEN GU
TO 250
218 FOR J=1 TO 3: BEEP .1,~30:
NEXT J
220 PRINT AT 15,0;"WRONG"
225 LET X=X-1
226 IF X<0 THEN CLS : GU TO 10
230 PAUSE 100
240 GU TO 50
250 PRINT AT 9,X/2;"(1SP/93)"
252 IF A$="1" AND Z=H THEN PRI
NT AT 5,3;"=H"
253 IF A$="2" AND Z=K THEN PRI
NT AT 5,3;"=K"
254 IF A$="3" AND Z=M THEN PRI
NT AT 5,3;"=M"
255 LET X=X+1
265 IF X=10 OR X=13 OR X=15 THE
N PRINT AT 15,3;"Good ";N$
266 IF X=10 OR X=12 OR X=15 THE
N PRINT AT 16,3;"keep going"
270 IF X<24 THEN GU TO 300
272 BEEP .4,19: BEEP .2,10
275 PRINT AT 12,29;"(95)"
278 PRINT AT 13,29;"(95)"
280 PRINT AT 14,15;"WELL DONE
"
285 PRINT AT 15,15;N$

```

```

286 LET t=FN t()
288 PRINT AT 20,5;"Time taken =
";t-t1;"seconds"
290 STOP
300 PAUSE 50
302 GU TO 50
305 PRINT AT 7,11;"ARITHMETIC"
306 PRINT AT 9,11;"EXPRESS"
307 PAUSE 300
308 CLS
311 PRINT AT 0,3;"The train is
now waiting for the driver"
312 PRINT
313 PRINT "You must obtain corr
ect answers to move the train"
314 PRINT
315 PRINT "Wrong answers put th
e train into reverse"
316 PRINT : PRINT "You should t
ry to improve your time of ar
rival"
317 PRINT
318 PRINT "Time taken is shown
on arrival"
319 PAUSE 800: CLS
320 DEF FN t()=(65536#PEEK 2367
+256#PEEK 23673#PEEK 23672)/50:
REM secs since start
325 LET t1=FN t()
330 RETURN

```


BMX

BECOME a fully-fledged BMX Rider in Ian Drake's program for the 48K Spectrum. The game requires skill, as you must judge the correct speed to jump to clear the ramps as they appear before you.

RIDER



```

100 CLS
110 PRINT AT 0,10;"(9a) BMX'9d)"
"
120 PRINT AT 2,0;" The object o
f the game is to
defining ramps.You
BMX with keys 'B'
and increase your
nd '5' to go left
your speed by 1.
the ramp at the
to clear it.Each
ar it the ramp
length.If you
ramps you become a BMX Rider.Go
od luck!!!"
130 PRINT AT 10,2;"Press any ke
y to start"
140 PAUSE 0
1001 CLS
1005 LET a=10
1010 LET j=1
1015 LET sc=0
1025 PRINT AT 0,0; FLASH 1;"SPEE
D:";s
1030 PRINT AT 0,12; FLASH 1;"SCO
RE:";sc
1035 PRINT AT 0,22; FLASH 1;"JUM
P:";j
1045 PLOT 0,95; DRAW 255,0
1050 PLOT 0,94; DRAW 255,0
1060 LET b$="(9b'93'9c)"
1065 PRINT AT 9,15;b$
1070 PAUSE 50; BEEP .00,10; BEEP
.01,-2; BEEP .5,3; BEEP .00,10
2005 LET a=0
2010 LET b=9
2015 LET a$="(9a) " IF INKEY$="
'5' THEN LET a$="(9d) "
2020 LET a+=(INKEY$="B' AND a<2
9)-(INKEY$="5' AND a>0)
2025 PRINT AT b,a,a$
2035 IF INKEY$="B' THEN LET s=s
+2; IF a>9 THEN LET s=99
2040 IF INKEY$="5' THEN LET s=s
-1; IF s<10 THEN LET s=10
2045 PRINT AT 0,0; FLASH 1;"SPEE
D:";s
2050 IF j=1 THEN GO TO 6000
2055 IF j=2 THEN GO TO 6000
2060 IF j=3 THEN GO TO 6000
2065 IF j=4 THEN GO TO 6000
2070 IF j=5 THEN GO TO 6000
2075 IF j=6 THEN GO TO 6000
2080 IF j=7 THEN GO TO 6000
2100 GO TO 2015
3005 PRINT AT b,a;" "
3010 LET b=0; LET a=a+1
3015 PRINT AT b,a,a$
3020 FOR a=14 TO j+15
3025 PRINT AT b,a,a$; PAUSE 3
3030 NEXT a
3035 PRINT AT b,a;" "
3040 LET b=9
3045 PRINT AT b,a,a$
3050 LET j=j+1; LET sc=sc+10; LE
T a=10
3055 PRINT AT 0,22; FLASH 1;"JUM
P:";j; PRINT AT 0,12; FLASH 1;"S
CORE:";sc
3060 IF j=2 THEN LET b$="(9a'2#
93'9c)"
3065 IF j=3 THEN LET b$="(9b'3#
93'9c)"
3070 IF j=4 THEN LET b$="(9b'4#
93'9c)"
3075 IF j=5 THEN LET b$="(9b'5#
93'9c)"

```

```

3080 IF j=6 THEN LET b$="(9b'6#
93'9c)"
3085 IF j=7 THEN LET b$="(9b'7#
93'9c)"
3090 IF j=8 THEN GO TO 6000
3095 PRINT AT b,a;" "
3100 GO TO 1065
4005 PRINT AT b,a;" "
4010 LET b=8
4015 LET a=a+1
4020 PRINT AT b,a,a$
4025 FOR a=14 TO 15
4030 PRINT AT b,a,a$; PAUSE 10
4035 NEXT a
4040 PRINT AT b,a;" "
4045 LET b=9
4050 PRINT AT b,a;"(9a)"
4055 PAUSE 50
4060 GO TO 7000
6000 IF a=12 AND sc=sc+32 OR a=1
2 AND s=sc+40 THEN GO TO 4000
6005 IF a=12 AND s=sc+40 OR a=1
2 AND sc=sc+30 THEN GO TO 3000
6010 GO TO 2015
7005 CLS
7015 FOR a=1 TO 9

```

```

7020 PRINT AT 3,a;" (9a) YOU CRAS
HED'9d)" PAUSE 10
7025 NEXT a
7030 PRINT AT 9,10;"YOU SCORED:"
;sc
7040 PRINT AT 15,1;"PRESS ANY KE
Y FOR ANOTHER GAME"
7050 PAUSE 0
7060 RUN
8005 CLS
8010 PRINT AT 5,1;"YOU HAVE JUMP
ED ALL THE RAMPS YOU ARE NU
W A BMX RIDER WELL
DONE!!!"
8020 GO TO 7030
9000 FOR z=USR "a" TO USR "d"+7
9010 READ user; PUKE z,user
9020 NEXT z
9030 DATA 48,56,48,127,118,153,1
53,102
9040 DATA 0,0,7,15,31,63,127,255
9050 DATA 0,0,224,240,248,252,25
4,255
9060 DATA 12,29,12,254,110,153,1
53,102
9070 RETURN

```


WINDFALL



CATCH the apples in your basket as the windfalls fall from the trees. Beware, because Farmer Haynes is on the prowl and if he catches you he will have your guts for garters.

Windfall was written for the 16K ZX-81 by Nicky Thorpe, aged 14, of Ashford, Kent.

```

1 REM "APPLE"
2 LET Y=13
3 LET Z=0
10 PRINT AT 0,10;" (4*isp) "
20 PRINT AT 1,10;" (6*isp) "
30 PRINT AT 2,10;" (8*isp) "
40 PRINT AT 3,10;" (6*isp) "
50 PRINT AT 4,10;" (4*isp) "
60 PRINT AT 5,10;" (2*isp) "
"
70 PRINT AT 6,10;" (2*isp)
"
80 PRINT AT 7,10;" (2*isp)
"
90 PRINT AT 8,10;" (2*isp)
"
95 PRINT AT 9,0;"(32*gh)"
96 PRINT AT 21,0;"(32*isp)"
110 PRINT AT 4,11;"*"
120 PRINT AT 4,16;"*"
130 PRINT AT 3,10;"*"
140 PRINT AT 3,17;"*"

141 PRINT AT 9,0;"(isp:30*isp:15
p)"
142 PRINT "(isp:30*isp:1sp)"
143 PRINT "(isp:30*isp:1sp)"
144 PRINT "(isp:30*isp:1sp)"
145 PRINT "(isp:30*isp:1sp)"
146 PRINT "(isp:30*isp:1sp)"
147 PRINT "(isp:30*isp:1sp)"
148 PRINT "(isp:30*isp:1sp)"
149 PRINT "(isp:30*isp:1sp)"
150 LET X=20
151 PRINT "(isp:30*isp:1sp)"
152 PRINT "(isp:30*isp:1sp)"
153 PRINT "(isp:30*isp:1sp)"
154 LET A=INT (RND*10+6)
156 LET B=10
157 PRINT AT B,A;"*" AT B-1,A;"
"
158 LET B=B+1
170 IF INKEY$="5" THEN LET Y=Y-
1
100 IF INKEY$="B" THEN LET Y=Y+

135 IF B=X AND A=Y+1 THEN GOTO
300
106 IF B=X AND A=Y+2 THEN GOTO
300
190 IF Y<1 THEN LET Y=Y+1
192 PRINT AT 19,8;"
"
200 IF Y>26 THEN LET Y=Y-1
205 IF B=21 THEN GOTO 400
210 PRINT AT X,Y;" (9u:9v) "
220 GOTO 157
300 LET Z=Z+5
305 PRINT AT 0,0;"SCORE=";Z
310 GOTO 154
400 CLS
410 PRINT "YOU DROPPED AN APPLE
"
411 PRINT "AND THE FARMER GOT Y
OU."
413 PRINT
415 PRINT "YOU SCORED ";Z
420 PRINT
430 PRINT "DO YOU WISH TO PLAY
AGAIN?"
435 PRINT
437 PRINT " (Y) OR (N) "
440 IF INKEY$="Y" THEN GOTO 500
450 IF INKEY$="N" THEN GOTO 600
460 IF INKEY$<>" " THEN GOTO 440
470 GOTO 440
500 CLS
510 GOTO 1
600 CLS
610 PRINT AT 10,10;"ok goodbye"
620 STOP

```


SAVE FREDDIE

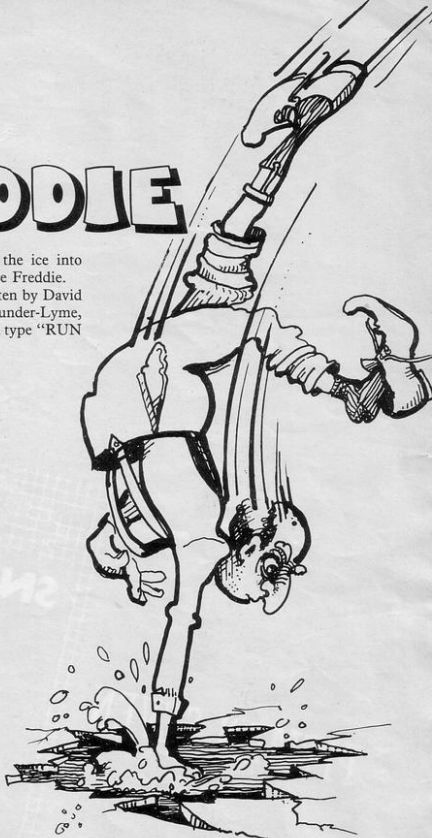
POOOR OLD FREDDIE has fallen from an aeroplane on a cold winter day without his parachute. Guide Freddie using keys 5 and 8 towards a lake which will break his fall. Unfortunately the lake is frozen but

there is a small break in the ice into which you must manoeuvre Freddie.

Save Freddie was written by David Knight of Newcastle-under-Lyme, Staffs. To run the program type "RUN 300" then NEWLINE.

```

50 PRINT AT X,Y;"A"
60 LET Y=Y-(INKEY#="5")+(INKEY
#="8")
70 LET X=X+X/X
80 PRINT AT X,Y;"C1")
90 IF X<>L THEN GOTO 50
100 IF Y<>Q THEN GOTO 500
150 PRINT "BRRR, IT'S COLD IN HER
E..."
160 LET T=T+L/L
170 PAUSE L*L
180 CLS
190 LET X=L/L
200 PRINT T
210 LET Y=INT (RND*L)+L/L
220 LET Q=INT (RND*L)+L/L
230 PRINT AT L,Q-Q;"(isp:21*9h:
isp)"
240 PRINT AT L,Q;" "
250 GOTO 50
300 LET L=19
310 LET T=L-L
320 GOTO 180
500 PRINT "SPLATTU"
    
```



JOHAN WEST, aged 11, of Mumbles, Swansea wrote **It's snowing again** for the 1K ZX-81.

Dodge the superfast snowflakes heading straight for you as you rush home from school, late for your dinner. Use keys 5 and 8 to escape a soaking. You receive 10 points for every snowflake which misses you.

```

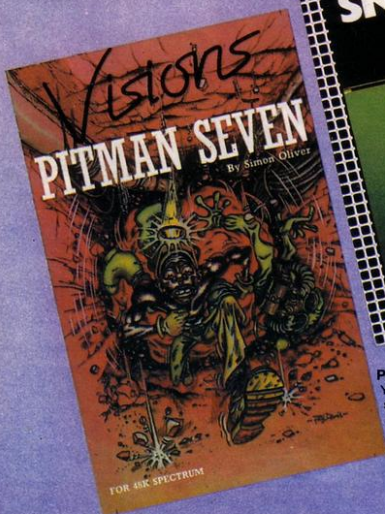
10 LET A=11
20 LET S=0
30 PRINT AT 21,INT (RND*26);"*"
***"
40 PRINT AT 0,A;
50 IF PEEK (PEEK 16398+256*PEE
K 16399)>23 THEN GOTO 120
60 PRINT "V"
70 SCROLL
80 IF INKEY#="5" THEN LET A=A-
1
90 IF INKEY#="8" THEN LET A=A+
1
100 LET S=S+10
110 GOTO 30
120 PRINT AT 0,0;S
    
```

IT'S SNOWING AGAIN



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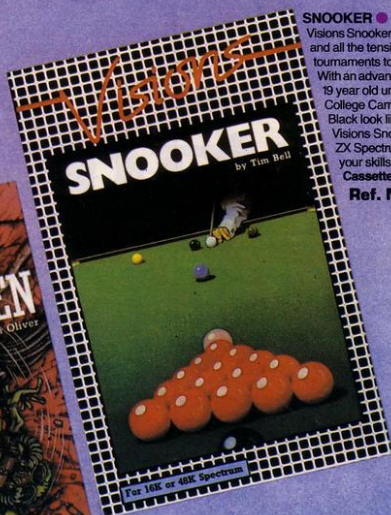
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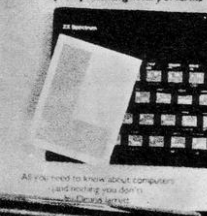
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